ORDER No. ACED030239C8

Service Manual

AUTOMOTIVE AFTERMARKET

COMPACT disc DIGITAL AUDIO TEXT WMA MP3 PANASONIC INTELLIGENT RDS EON

CQ-DFX683N / CQ-DFX223N / CQ-DFX213N / CQ-DFX203N

Removable Full Front MP3 WMA CD Player / Receiver with CD Changer Control

MP3/WMA
Panasonic
50W×4
CD RECEIVER WITH CHANGER CONTROL

(CQ-DFX683N)

SPECIFICATIONS

Specifications*

General	
Power Supply	**DC 12V (11V - 16V), Test Voltage 14.4V Negative Ground**
Current Consumption	**Less then 2.2A (CD mode; 0.5W 4-Speaker)**
Maximum Power Output	**50W×4 (at 4 Ω)**
Power Output	**22W×4 (DIN45 324, at 4 Ω)**
Speaker Impedance	**4-8 Ω**
External Input Impedance	**10k Ω (AUX IN)**
External Input Sensitivity	**Max.2V (AUX IN)**
Pre-Amp Output Voltage	**2.5V (CD mode)**
Pre-Amp Output Impedance	**200 Ω**
Sub-Woofer Output Voltage	**2.5V**
FM Stereo Radio	
Frequency Range	**87.5MHz - 108MHz**
Usable Sensitivity	**6dB/μV (SN 30dB)**
Stereo Separation	**35dB (at 1kHz)**
MW Radio	
Frequency Range	**531 - 1,602kHz**

Usable Sensitivity	**29dB/ μ V (S/N20dB)**
LW Radio	
Frequency Range	**153 - 279kHz**
Usable Sensitivity	**34dB/ μ V (S/N20dB)**
CD Player	
Sampling Frequency	**8 Times Oversampling**
DA Converter	**1bit/4 DAC System**
Pick-Up Type	**Astigma 3-beam**
Light Source	**Semiconductor Laser**
Wave length	**780nm**
Frequency Response	**20Hz to 20kHz (±1dB)**
Signal to Noise Ratio	**96dB**
Total Harmonic Distortion	**0.01%(1kHz)**
Wow and Flutter	**Below measurable limits**
Channel Separation	**75dB**
MP3/WMA(Only for CQ-DFX683N)	
MP3 decoding	**MPEG1 audio layer 3** **MPEG2 audio layer 3**
Bit rate	
(MPEG1 audio layer 3)	**32kbps-320kbps** **VBR (Variable Bit Rate)**
(MPEG2 audio layer 3)	**8kbps-160kbps** **VBR (Variable Bit Rate)**
(WMA)	**64kbps-192kbps**
Sampling frequency	
(MPEG1 audio layer 3)	**32kHz, 44.1 kHz, 48kHz**
(MPEG2 audio layer 3)	**16kHz, 22.05 kHz, 24kHz**
(WMA)	**32kHz, 44.1 kHz, 48kHz**
Dimensions**	**178×50×155mm**
Weight**	**1.4kg**

*** Specifications and the design are subject to possible modification without notice due to improvements.**

**** Dimensions and Weight shown are approximate.**

-Above specifications comply with EIA standards.

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⚠ WARNING

This service information is designed for experienced repair technicians only and is not designed for use by the general public. It does not contain warnings or cautions to advise non-technical individuals of potential dangers in attempting to service a product. Products powered by electricity should be serviced or repaired only by experienced professional technicians. Any attempt to service or repair the product or products dealt with in this service information by anyone else could result in serious injury or death.

Panasonic

IMPORTANT SAFETY NOTICE

There are special components used in this equipment which are important for safety. These parts are marked by ⚠ in the Schematic Diagrams, Circuit Board Diagrams, Exploded Views and Replacement Parts List. It is essential that these critical parts should be replaced with manufacturer's specified parts to prevent shock, fire or other hazards. Do not modify the original design without permission of manufacturer.

1. ABOUT LEAD FREE SOLDER (PbF)

Distinction of PbF PCB:

PCBs (manufactured) using lead free solder will have a PbF stamp on the PCB.

Caution :

- **Pb free solder has a higher melting point than standard solder; Typically the melting point is 50 - 70°F (30 - 40°C) higher. Please use a soldering iron with temperature control and adjust it to 700 ± 20°F (370 ± 10°C). In case of using high temperature soldering iron, please be careful not to heat too long.**
- **Pb free solder will tend to splash when heated too high (about 1100°F/600°C)**
- **This lead free solder will be used for the products after serial No. 1,000,001.**

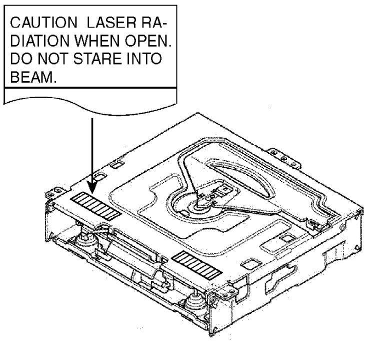
2. LASER PRODUCTS

CAUTION:

This product utilizes a laser diode with the unit turned "on", laser radiation is emitted from the pickup lens.

Laser radiation from the pickup lens is safety level, but be sure the followings:

1. Do not disassemble the optical pickup unit, since radiation from exposed laser diode is dangerous.
2. Do not adjust the variable resistor on the pickup unit. It was already adjusted.
3. Do not look at the focus lens using optical instruments.
4. Recommend not to look at pickup lens for a long time.



Deck Ass'y (Upper Side)

Caution
This Product utilizes a laser.
Use of controls or adjustments or performance of procedures other than those specified herein may result in hazardous radiation exposure.

3. FEATUERS

- **Digital servo for reliable playback.**
- **PLL (Phase Locked Loop) synthesized tuning.**
- **18-FM, 6-AM presets with preset scan.**
- **Removable face plate.**
- **RDS (Radio Data System)**
- **MP3/WMA Playback from CD-R/RW (CQ-DFX683N only).**

4. REPLACING THE FUSE

Use fuses of the same specified rating (15amps). Using different substitutes or fuses with higher ratings, or connecting the product directly without a fuse, could cause fire or damage to the stereo unit.

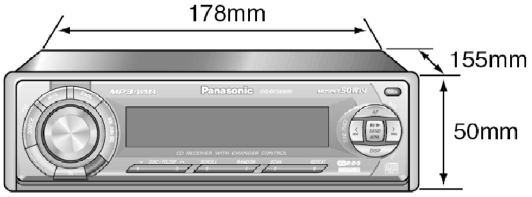
5. MAINTENANCE

Your product is designed and manufactured to ensure a minimum of maintenance. Use a dry, a soft cloth for routine exterior cleaning. Never use benzine, thinner or other solvents.

6. NOTES

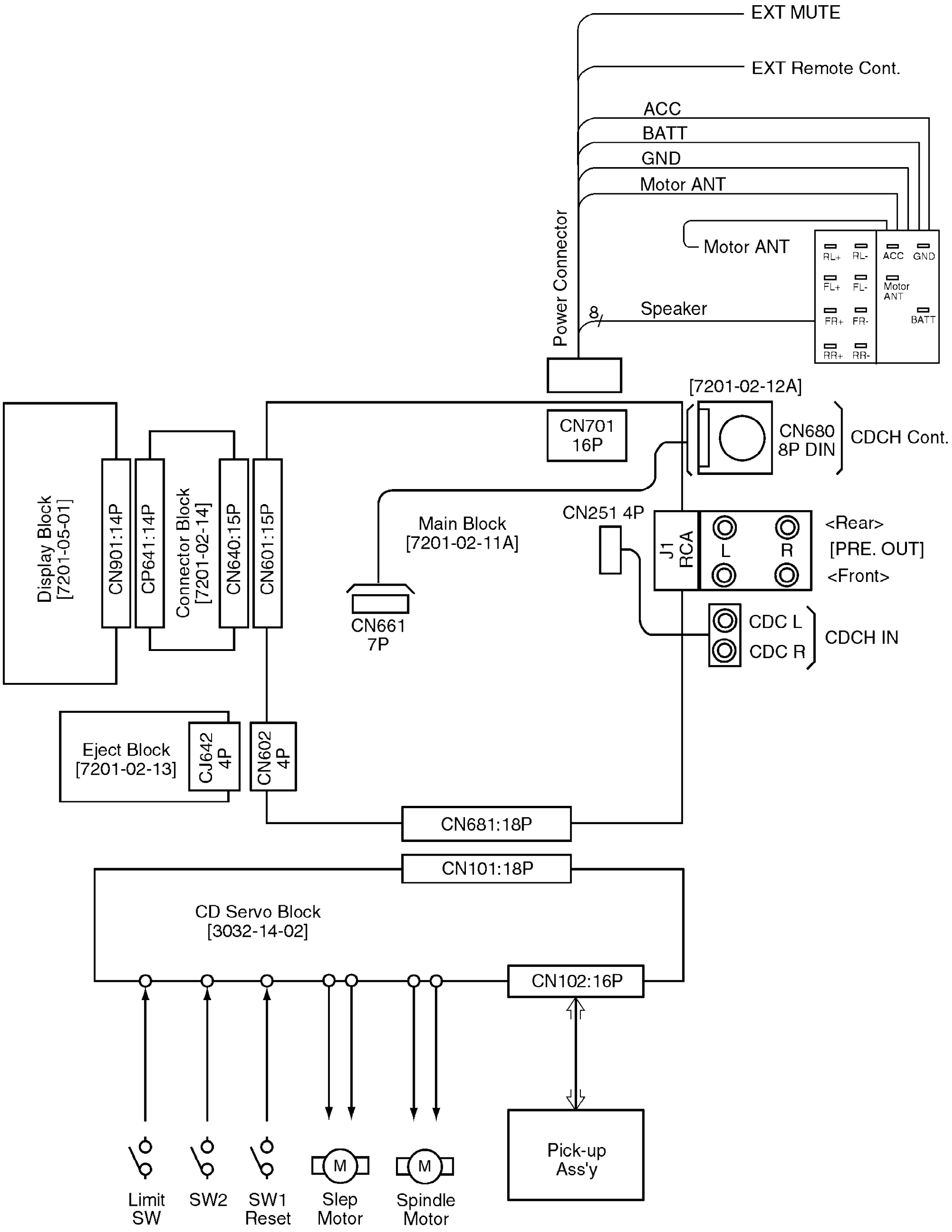
[RADIO BLOCK]
Do not align the AM/FM package block. When the package block is necessary, it will be supplied already aligned at the factory.
[CD DECK BLOCK]
This model has no servo alignment points because microcomputer controls the servo circuit.

7. DIMENSIONS

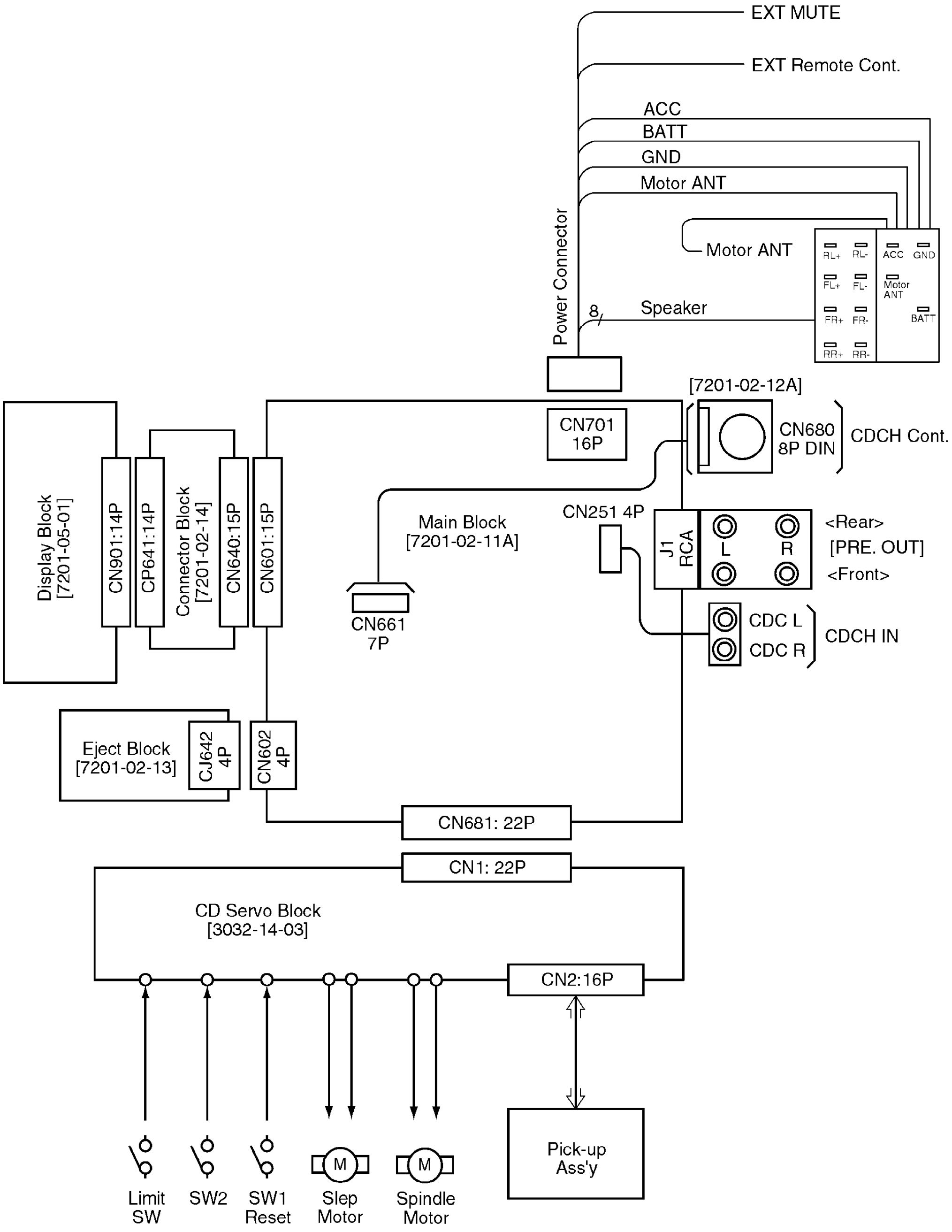


8. WIRING CONNECTION

8.1. CQ-DFX683N


EXT MUTE
EXT Remote Cont.
ACC
BATT
GND
Motor ANT
Motor ANT
Power Connector
8
Speaker
RL+
RL-
FL+
FL-
FR+
FR-
RR+
RR-
ACC
GND
Motor ANT
BATT
[7201-02-12A]
CN680 8P DIN
CDCH Cont.
CN701 16P
Display Block [7201-05-01]
CN901:14P
CP641:14P
Connector Block [7201-02-14]
CN640:15P
CN601:15P
Main Block [7201-02-11A]
CN251 4P
J1 RCA
L
R
<Rear>
[PRE. OUT]
<Front>
CN661 7P
CDC L
CDC R
CDCH IN
Eject Block [7201-02-13]
CJ642 4P
CN602 4P
CN681:18P
CN101:18P
CD Servo Block [3032-14-02]
CN102:16P
M
M
Limit SW
SW2
SW1 Reset
Slep Motor
Spindle Motor
Pick-up Ass'y

8.2. CQ-DFX223N/DFX213N/DFX203N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<Front>
CN661
7P
CDC L
CDC R
CDCH IN
Eject Block
[7201-02-13]
CJ642
4P
CN602
4P
CN681: 22P
CN1: 22P
CD Servo Block
[3032-14-03]
CN2:16P
M
M
Limit
SW
SW2
SW1
Reset
Slep
Motor
Spindle
Motor
Pick-up
Ass'y

9. TERMINALS DESCRIPTION

9.1. Main Block [CQ-DFX683N]

IC601 : YESAM181

Pin No.	Port	Description	I/O	(V)		
				FM	AM	CD
1	CH SENS	CD changer detect	I	0.8	0.7	0.7
2	SD/ST	Radio station detect	I	5.1	5.1	5.1
3	EJECT	Eject SW	I	5.2	5	5.2
4	AVSS	Ground	-	0	0	0
5	EXT.MUTE	External mute	O	0	0	5.1
6	NC	-	-	-	-	-
7	AVREF1	(Conecting to +5V)	-	5.2	5.2	5.2
8	SUB SO	LCD data	I	5.1	5.1	5.1
9	LCD DI	LCD data	O	0	5.1	5.1
10	SUB SI	LCD clock	O	5.1	5.1	5.1
11	CH DATA	(Ground pull down)	-	0	0	0
12	NC	-	-	-	-	-
13	CH CLK	(Ground pull down)	-	0	0	0
14	CH REM	(Ground pull down)	-	5.2	5.2	5.2
15	BZ OUT	Buzzer signal output	O	0	0	0
16	CD SO	CD data output	I	5	5	0
17	CD SI	CD data input	O	0	0	0
18	CD SCK	CD clock	O	5.2	5	5.2
19	LCD CE	LCD chip enable	O	0	0	0
20	CD RST	CD reset	O	0	0	5.2
21	AMP CNT	Amp control signal	O	5.2	5.1	5.2
22	ANT CNT	ANT control signal	O	5.2	5.2	0
23	AMP MUTE	Amp mute control	O	5.2	5.2	5.2
24	CD STB	CD strobe	O	0	0	5.2
25	CD A0	CD A0	O	0	0	4.6
26	NC	-	-	-	-	-
27	NC	-	-	-	-	-
28	NC	-	-	-	-	-
29	NC	-	-	-	-	-
30	NC	-	-	-	-	-
31	NC	-	-	-	-	-
32	NC	-	-	-	-	-
33	VSS1	Ground	-	0	0	0
34	NC	-	-	-	-	-
35	ILL CNT	Illumi. Control	O	0	0	0
36	SCL	Audio control serial clock	O	5.2	5.2	5.2
37	SDA	Audio control data	O	5.2	5.2	5.2
38	S LED	S LED drive signal	O	0	0	0
39	NC	-	-	-	-	-

Pin No.	Port	Description	I/O	(V)		
				FM	AM	CD
40	SPEANA SEL	-	O	-	-	-
41	PLL DI	PLL data	O	0	0	0
42	PLL DO	PLL data	I	5.1	5.2	5.2
43	PLL CLK	PLL data clock	O	5.2	5.2	5.2
44	PLL CE	PLL chip select	O	0	0	0
45	ROM CS	ROM chip select	O	5.2	5.2	5.2
46	PANEL	Panel switch signal	I	0	0	0
47	OP/CL	Open/close detect	I	5.1	5.1	5.1
48	LCD5V CNT	LCD 5V control	O	0	0	0
49	EEPROM DI(NC)	-	-	-	-	-
50	EEPROM SK(NC)	-	-	-	-	-
51	DIM1	(Ground pull down)	-	0	0	0
52	DIM2	(Ground pull down)	-	0	0	0
53	EEPROM DO(NC)	-	-	-	-	-
54	AF MUTE	Audio mute signal	O	5.2	5.2	5.2
55	INV CNT	Inverter control	O	5.1	5.1	5.2
56	CD CNT	CD power control	O	5.1	5.1	5.2
57	MAIN CONT	Main power control	O	5	5	5
58	NC	-	-	-	-	-
59	RDS DATA	RDS data input	I	2.8	0	0
60	RESET	System reset	I	5.2	5.2	5.2
61	RM DATA	Remote control data	I	-	-	-
62	BATT	Battery detekut	I	5.2	5.2	5.2
63	RDS CLK	RDS clock input	I	5.0	5.0	5.0
64	CDC STB	(Ground pull down)	-	0	0	0
65	ROTARY 1	Rotary encoder input 1	I	5.2	5.2	5.2
66	ROTARY 2	Rotary encoder input 2	I	5.2	5.2	5.2
67	VSS0	Ground	-	0	0	0
68	VDD1	+5V power supply	-	5.2	5.2	5.2
69	X2	Crystal oscillator	-	3	3	3
70	X1	Crystal oscillator	-	2.5	2.5	2.5
71	TEST	(Test terminal)	-	0	0	0
72	XT2	Crystal oscillator	-	2.9	2.9	2.9
73	XT1	Crystal oscillator	-	2.6	2.6	2.6
74	VDD0	+5V power supply	-	5.2	5.2	5.2

Pin No.	Port	Description	I/O	(V)		
				FM	AM	CD
75	AVDD	+6V power supply	-	5.2	5.2	5.2
76	VSM	VSM	I	0	0	0
77	ACC	ACC detect	I	4.3	4.3	4.3
78	INIT/B	(+5V pull up)	-	5.2	5.2	5.2
79	SPEANA AIN	(Ground pull down)	-	0	0	0
80	LEVEL L	Level in	I	1.4	1.4	2.5

9.2. Main Block [CQ-DFX223N/213N/203N]

IC601 : YESAM180

Pin No.	Port	Description	I/O	(V)		
				FM	AM	CD
1	CH SENS	CD changer detect	I	0.8	0.7	0.7
2	SD/ST	Radio station detect	I	5.1	5.1	5.1
3	EJECT	Eject SW	I	5.2	5	5.2
4	AVSS	Ground	-	0	0	0
5	EXT.MUTE	External mute	O	0	0	5.1
6	NC	-	-	-	-	-
7	AVREF1	(Conecting to +5V)	-	5.2	5.2	5.2
8	SUB SO	LCD data	I	5.1	5.1	5.1
9	LCD DI	LCD data	O	0	5.1	5.1
10	SUB SI	LCD clock	O	5.1	5.1	5.1
11	CH DATA	(Ground pull down)	-	0	0	0
12	CD OSC	CD Osc stop	O	5.2	5.2	0
13	CH CLK	(Ground pull down)	-	0	0	0
14	CH REM	(Ground pull down)	-	5.2	5.2	5.2
15	BZ OUT	Buzzer signal output	O	0	0	0
16	CD SO	CD data output	I	5	5	0
17	CD SI	CD data input	O	0	0	0
18	CD SCK	CD clock	O	5.2	5	5.2
19	LCD CE	LCD chip enable	O	0	0	0
20	CD RST	CD reset	O	0	0	5.2
21	AMP CNT	Amp control signal	O	5.2	5.1	5.2
22	ANT CNT	ANT control signal	O	5.2	5.2	0
23	AMP MUTE	Amp mute control	O	5.2	5.2	5.2
24	CD STB	CD strobe	O	0	0	5.2
25	CD A0	CD A0	O	0	0	4.6
26	CD RFOK	RF OK signal	I	0	0	5
27	CD LOCK	CD lock signal	I	0	0	5

Pin No.	Port	Description	I/O	(V)		
				FM	AM	CD
28	CD LIMIT	CD limit switch signal	I	0	0	5
29	CD SW1	CD SW1		0	0	0
30	CD SW2	CD SW2	I	5.2	5	0
31	NC	-	-	-	-	-
32	NC	-	-	-	-	-
33	VSS1	Ground	-	0	0	0
34	NC	-	-	-	-	-
35	ILL CNT	Illumi. Control	O	0	0	0
36	SCL	Audio control serial clock	O	5.2	5.2	5.2
37	SDA	Audio control data	O	5.2	5.2	5.2
38	S LED	S LED drive signal	O	0	0	0
39	EJ ILL	Eject Led drive signal	O	5.2	5.2	5.2
40	SPEANA SEL	-	O	-	-	-
41	PLL DI	PLL data	O	0	0	0
42	PLL DO	PLL data	I	5.1	5.2	5.2
43	PLL CLK	PLL data clock	O	5.2	5.2	5.2
44	PLL CE	PLL chip select	O	0	0	0
45	ROM CS	ROM chip select	O	5.2	5.2	5.2
46	PANEL	Panel switch signal	I	0	0	0
47	OP/CL	Open/close detect	I	5.1	5.1	5.1
48	LCD5V CNT	LCD 5V control	O	0	0	0
49	EEPROM DI(NC)	-	-	-	-	-
50	EEPROM SK(NC)	-	-	-	-	-
51	DIM1	(Ground pull down)	-	0	0	0
52	DIM2	(Ground pull down)	-	0	0	0
53	EEPROM DO(NC)	-	-	-	-	-
54	AF MUTE	Audio mute signal	O	5.2	5.2	5.2
55	INV CNT	Inverter control	O	5.1	5.1	5.2
56	CD CNT	CD power control	O	5.1	5.1	5.2
57	MAIN CONT	Main power control	O	5	5	5
58	NC	-	-	-	-	-
59	RDS DATA (NC)	-	-	-	-	-
60	RESET	System reset	I	5.2	5.2	5.2
61	RM DATA	Remote control data	I	-	-	-

Pin No.	Port	Description	I/O	(V)		
				FM	AM	CD
62	BATT	Battery detekut	I	5.2	5.2	5.2
63	RDS CLK (NC)	-	-	-	-	-
64	CDC STB	(Ground pull down)	-	0	0	0
65	ROTARY 1	Rotary encoder input 1	I	5.2	5.2	5.2
66	ROTARY 2	Rotary encoder input 2	I	5.2	5.2	5.2
67	VSS0	Ground	-	0	0	0
68	VDD1	+5V power supply	-	5.2	5.2	5.2
69	X2	Crystal oscillator	-	3	3	3
70	X1	Crystal oscillator	-	2.5	2.5	2.5
71	TEST	(Test terminal)	-	0	0	0
72	XT2	Crystal oscillator	-	2.9	2.9	2.9
73	XT1	Crystal oscillator	-	2.6	2.6	2.6
74	VDD0	+5V power supply	-	5.2	5.2	5.2
75	AVDD	+6V power supply	-	5.2	5.2	5.2
76	VSM	VSM	I	0	0	0
77	ACC	ACC detect	I	4.3	4.3	4.3
78	INIT/B	(+5V pull up)	-	5.2	5.2	5.2
79	SPEANA AIN	(Ground pull down)	-	0	0	0
80	LEVEL L	Level in	I	1.4	1.4	2.5

9.3. Display Block

IC901 : YEAMLC75854T

Pin No.	Port	Description	I/O	(V)
1-39	S1-39	LCD segment data	O	2.5
40-43	COM1-4	LCD common	O	2.5
44,45	KS1, 2	Not used	-	-
46-49	KS3-6	Key strobe	O	0.9
50-54	KI1-5	Key data	I	0
55	TEST	(Connecting to ground)	-	0
56	VDD	+5V power supply	-	5.1
57	VDD1	VDD1 filter terminal	-	3.3
58	VDD2	VDD2 filter terminal	-	1.7
59	VSS	Ground	-	0
60	OSC	Oscillator terminal	-	3.9
61	DO	Key data output	O	4.4
62	CE	LCD driver chip enable	I	0
63	CLK	LCD clock	I	0
64	DI	LCD data	I	0

9.4. CD Servo Block [CQ-DFX683N]

IC401 : YESAM176

Pin No.	Port	Descriptions	I/O	(V)
1	CVSS1	GND	-	0
2	-	-	-	-
3	CVSS2	GND	-	0
4	DVSS1	I/O system (3.3V) power supply	-	3.3
5	A10	Address bus of FLASH ROM	O	0
6	-	-	-	-
7	A11	Address bus of FLASH ROM	O	3.3
8	A12		O	3.3
9	A13		O	3.3
10	A14		O	3.3
11	A15		O	3.3
12	/ CVDD1	CORE CPU system (1.6V) power supply	-	1.6
13	-	-	-	-
14	DVSS1	GND	-	0
15	CVSS3	GND	-	0

Pin No.	Port	Descriptions	I/O	(V)
16	/ CVDD2	I/O system (3.3V) power supply	-	1.6
17	-	-	-	-
18	-	-	-	-
19	-	-	-	-
20	nPS	FLASH ROM selection signal	O	3.3
21	-	-	-	-
22	-	-	-	-
23	R/W	Lead/light signal to FLASH ROM	O	3.3
24	nMSTRB	Memory access signal	O	3.3
25	-	-	-	-
26	-	-	-	-
27	MUTE	Mute signal output (H:Mute on)	O	0
28	-	-	-	-
29	-	-	-	-
30	-	-	-	-
31	SUBO	SUBO input	I	0
32	-	Operation mode setting (external pull-up)	I	3.3
33	DVDD2	I/O system (3.3V) power supply	-	3.3
34	CVSS4	GND	-	0
35	(GND)	GND	I	0
36	-	-	-	-
37	CVSS5	GND	-	0
38	-	-	-	-
39	-	-	-	-
40	DVSS2	GND	-	0
41	CLK C M	AUDIO bit clock input	I	1.6
42	SCK	Clock input	I	3.3
43	LRCK C M	AUDIO L/R identifying signal input	I	1.6
44	CDFS	Serial frame sink signal input	I	2.6
45	DATA M C	AUDIO serial data input	I	1.6
46	-	-	-	-
47	SI	Serial data input	I	0
48	CLK M C	AUDIO bit clock output	O	1.6
49	SCK	Clock input	I	3.3

Pin No.	Port	Descriptions	I/O	(V)
50	CVSS6	GND	-	0
51	-	-	-	-
52	CVDD3	CORE CPU system (1.6V) power supply	-	1.6
53	LRCK M C	AUDIO L/R identifying signal output	O	1.6
54	CDFS	Serial frame sink signal input	I	2.4
55	-	-	-	-
56	DVDD3	I/O system (3.3V) power supply	-	3.3
57	DVSS3	GND	-	0
58	REST SW	Mechanics deck REST SW input	I	3.3
59	DATA M C	AUDIO serial data output	O	1.6
60	SO	Serial data output	O	1.2
61	-	-	-	-
62	-	-	-	-
63	-	-	-	-
64	-	-	-	-
65	-	-	-	-
66	BLKCK	Subcode block clock pulse input	I	0
67	-	-	-	-
68	DVDD4	CORE CPU system (1.6V) power supply	-	1.6
69	SW1	Mechanics deck SW1 input	I	0
70	CVSS7	GND	-	0
71	MCLK	Clock output (To Servo DSP)	O	3.3
72	DVSS4	GND	-	0
73	MLD	Command load signal output (To Servo DSP)	I	3.3
74	MDATA	Command data output (To Servo DSP)	O	3.3
75	DVDD4	I/O system (3.3V) power supply	-	3.3
76	DVSS5	GND	-	0
77	-	Clock mode setting (L fixation)	I	0
78	-	Clock mode setting (H fixation)	I	3.3
79	-	Clock mode setting (L fixation)	I	-

Pin No.	Port	Descriptions	I/O	(V)
80	-	-	-	-
81	SW2	Mechanics deck SW2 input	I	0
82	-	-	-	-
83	-	-	-	-
84	-	-	-	-
85	-	-	-	-
86	-	-	-	-
87	-	-	-	-
88	-	-	-	-
89	-	-	-	-
90	CVSS8	GND	-	3.3
91	CVDD5	CORE CPU system (1.6V) power supply	-	0
92	(GND)	GND	I	1.6
93	DVSS6	GND	-	0
94	-	-	-	-
95	CLKENA	Oscillation output Cainabl signal	O	3.3
96	×1	Crystal Connection	O	0
97	×2	Crystal Connection	I	0
98	(VDD)	Reset signal input	I	1
99	D0	Data base of FLASH ROM	I/O	3.4
100	D1		I/O	0
101	D2		I/O	0
102	D3		I/O	0
103	D4		I/O	0
104	D5		I/O	0
105	A16	Address bus of FLASH ROM	O	0
106	DVSS7	GND	-	0
107	A17	Address bus of FLASH ROM	O	3.3
108	A18		O	0
109	A19		O	0
110	A20		O	0
111	CVSS9	GND	-	0
112	DVDD5	I/O system (3.3V) power supply	-	3.3
113	D6	Data bus of FLASH ROM	I/O	0
114	D7		I/O	0
115	D8		I/O	0
116	D9		I/O	0
117	D10		I/O	0
118	D11	Data bus of FLASH ROM	I/O	0
119	D12		I/O	0

Pin No.	Port	Descriptions	I/O	(V)
120	STAT	Status signal input	I	0.4
121	D13	Data path of FLASH ROM	I/O	0
122	D14		I/O	0
123	D15		I/O	0
124	SQCK	SOCK clock output(To Servo DPS)	O	3.2
125	CVDD6	CORE CPU system (1.6V) power supply	-	1.6
126	CVSS10	GND	-	0
127	-	-	-	-
128	DVSS8	I/O system (3.3V) power supply	-	0
129	-	-	-	-
130	DVDD6	I/O system (3.3V) power supply	-	3.3
131	A0	Address bus of FLASH ROM	O	0
132	A1		O	0
133	A2		O	3.3
134	A3		O	3.3
135	/RST	Reset signal output(To Servo DSP)	O	3.3
136	A4	Address bus of FLASH ROM	O	3.3
137	A5		O	0
138	A6		O	3.3
139	A7		O	3.3
140	A8		O	0
141	A9		O	3.3
142	CVDD7	CORE CPU system (1.6V) power supply	-	1.6
143	-	-	-	-
144	DVSS9	GND	-	0

9.5. CD Servo Block / [CQ-DFX223N/DFX213N/DFX203N]

IC1 : C1BB00000665

Pin No.	Port	Description	I/O	(V)
1	D.GND	Digital Ground	-	0
2	RFOK	RFOK Signal	O	5
3	/RESET	Reset	I	5
4	A0	Address 0	I	4.6
5	/STB	Strobe	I	5.2
6	/SCK	Serial Clock	I	5.2
7	SO	Serial Data Output	O	0
8	SI	Serial Data Input	I	3
9	/ XTALEN	Crystal Oscillaton Enable	I	0
10	D.VDD	Digital Power Supply	-	5
11	DA.VDD	D/A Converter Power Supply	-	4.9
12	ROUT	R-channel Audio Signal Output	O	-
13	DA.GND	D/A Converter Ground	-	-
14	REGC	Capacitor Connection for Regulator	-	-
15	DA.GND	D/A Converter Ground	-	-
16	LOUT	L-channel Audio Signal Output	O	-
17	DA.VDD	D/A Converter Power Supply	-	-
18	R+(NC)	-	-	-
19	R-(NC)	-	-	-
20	L-(NC)	-	-	-
21	L+(NC)	-	-	-
22	X.VDD	Crystal Oscillator Power Supply	-	-
23	XTAL	Crystal Connection	O	2.4
24	/XTAL	Crystal Connection	I	2.4
25	X.GND	Crystal Oscillator Ground	-	0
26	D.VDD	Digital Power Supply	-	5
27	EMPH (NC)	-	-	-
28	FLAG(NC)	-	-	-
29	DIN	Data Input	I	2.7
30	DOUT	Data Output	O	2.7
31	SCKIN	Serial Clock Input	I	2.8
32	SCKO	Serial Clock Output	O	2.8
33	LRCKIN	LR Clock Input	I	2.6
34	LRCK	LR Clock	O	2.6
35	HOLD/ WDCK(NC)	-	-	-

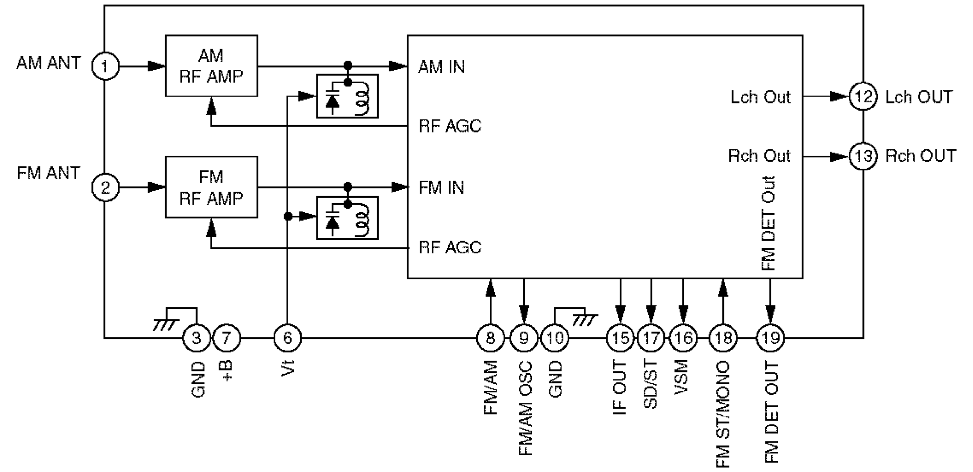
Pin No.	Port	Description	I/O	(V)
36	TX(NC)	-	-	-
37	D.GND	Digital Ground	-	0
38	C16M(NC)	-	-	-
39	LIMIT(NC)	-	-	-
40	D.VDD	Digital Power Supply	-	5
41	LOCK	Lock	O	5
42	RFCK(NC)	-	-	-
43	MIRR/ WFCK(NC)	-	-	-
44	PLCK(NC)	-	-	-
45	D.GND	Digital Ground	-	0
46	C1D1(NC)	-	-	-
47	C1D2(NC)	-	-	-
48	C2D1(NC)	-	-	-
49	C2D2(NC)	-	-	-
50	C2D3(NC)	-	-	-
51	D.VDD	Digital Power Supply	-	5
52	PACK(NC)	-	-	-
53	TSO(NC)	-	-	-
54	TSI	Parameter Input for Text Data	I	0
55	/TSCK	Serial Clock for Text Data	I	0
56	TSTB	Text Parameter Strobe	I	0
57	D.GND	Digital Ground	-	0
58	TEST0	Test	I	0
59	TEST1	Test	I	0
60	ATEST	Analog Test	O	2.2
61	A.GND	Analog Ground	-	0
62	FD	Focus Drive	O	2.5
63	TD	Tracking Drive	O	2.5
64	SD	Sled Drive	O	2.6
65	MD	Motor Drive	O	2.5
66	DAC0(NC)	-	-	-
67	DAC1(NC)	-	-	-
68	DAC2(NC)	-	-	-
69	DAC3(NC)	-	-	-
70	A.VDD	Digital Power Supply	-	5
71	EFM	EFM Signal	O	2.7
72	ASY	Slice Level	I	2.5
73	C3T	Capacitance Connection for 3T Signal Detecting Circuit	-	2.7

Pin No.	Port	Description	I/O	(V)
74	RFI	RF Signal Input	I	2.5
75	AGCO	AGC Amp Output	O	2.5
76	AGCI	AGC Amp Input	I	2.5
77	RFO	RF Amp Output	O	2.6
78	EQ2	Equalizer Parts Connection for RF Amp	-	2.5
79	EQ1	Equalizer Parts Connection for RF Amp	-	0
80	RF-	Impedance Connection to RF Amp for Negative Feedback	I	2.4
81	A.GND	Analog Ground	-	0
82	A	Error Signal Input	I	2.7
83	C(NC)	-	-	-
84	B	Error Signal Input	I	2.7
85	D(NC)	-	-	-
86	F	Error Signal Input	I	3
87	E	Error Signal Input	I	3
88	A.VDD	Analog Power Supply	-	5
89	REFOUT	Reference Output	O	2.5
90	FE-	Impedance Connection to Focus Error Amp for Negative Feedback	I	2.5
91	FEO	Focus Error Amp Output	O	2.5
92	TE-	Impedance Connection to Tracking Error Amp for Negative Feedback	I	2.5
93	TEO	Tracking Error Amp Output	O	2.5
94	TE2	Tracking Error Amp Output Multiplied by Two	O	2.7
95	TEC	Tracking Error Comparator	I	2.5
96	A.GND	Analog Ground	-	0
97	PD	Photo Diode Signal (for Detecting Laser Power) Input	I	0.2
98	LD	Laser Diode Control Current Output	O	3.7
99	PN	APC Circuit Polarity Control	I	0
100	A.VDD	Analog Power Supply	-	5

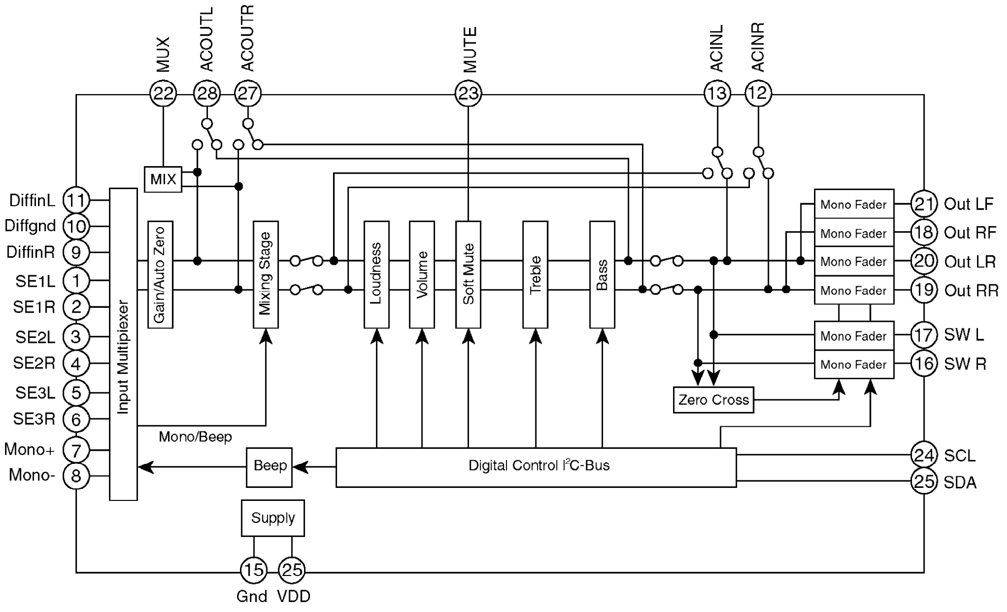
10. PACKAGE AND IC BLOCK DIAGRAM

10.1. Main Block

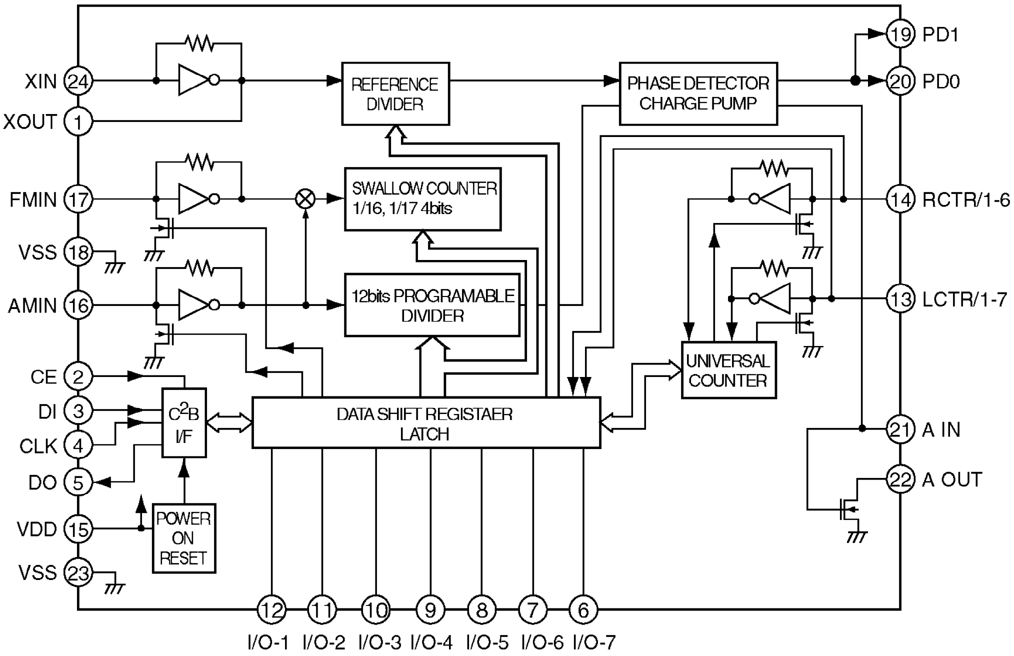
PA51 : YESAP263


AM ANT
FM ANT
AM RF AMP
FM RF AMP
AM IN
RF AGC
FM IN
RF AGC
Lch Out
Rch Out
FM DET Out
Lch OUT
Rch OUT
1
2
3
7
6
8
9
10
15
17
16
18
19
12
13
GND
+B
Vt
FM/AM
FM/AM OSC
GND
IF OUT
SD/ST
VSM
FM ST/MONO
FM DET OUT

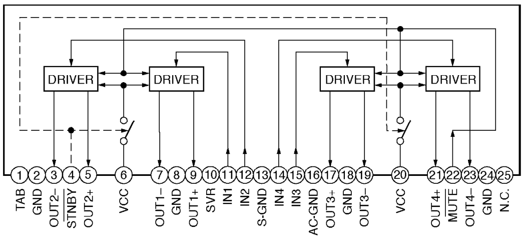
IC201 : C1BB00000543


MUX
ACOUTL
ACOUTR
MUTE
ACINL
ACINR
22
28
27
23
13
12
MIX
DiffinL
Diffgnd
DiffinR
SE1L
SE1R
SE2L
SE2R
SE3L
SE3R
Mono+
Mono-
11
10
9
1
2
3
4
5
6
7
8
Input Multiplexer
Gain/Auto Zero
Mixing Stage
Loudness
Volume
Soft Mute
Treble
Bass
Mono Fader
Mono Fader
Mono Fader
Mono Fader
Mono Fader
Mono Fader
Zero Cross
Mono/Beep
Beep
Digital Control I²C-Bus
Supply
21
18
20
19
17
16
24
25
Out LF
Out RF
Out LR
Out RR
SW L
SW R
SCL
SDA
15
25
Gnd
VDD

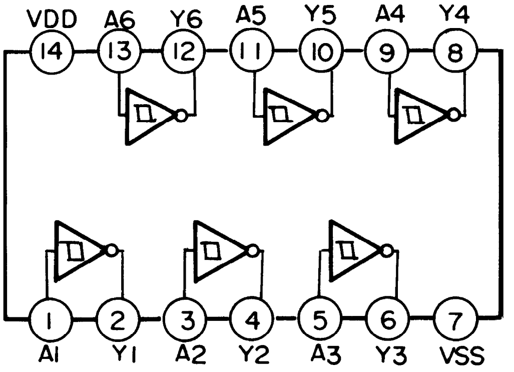
IC401 : C1BB00000644


XIN
XOUT
FMIN
VSS
AMIN
CE
DI
CLK
DO
VDD
VSS
24
1
17
18
16
2
3
4
5
15
23
REFERENCE DIVIDER
PHASE DETECTOR CHARGE PUMP
SWALLOW COUNTER 1/16, 1/17 4bits
12bits PROGRAMABLE DIVIDER
C2B I/F
DATA SHIFT REGISTAER LATCH
POWER ON RESET
UNIVERSAL COUNTER
19 PD1
20 PD0
14 RCTR/1-6
13 LCTR/1-7
21 A IN
22 A OUT
12
11
10
9
8
7
6
I/O-1
I/O-2
I/O-3
I/O-4
I/O-5
I/O-6
I/O-7

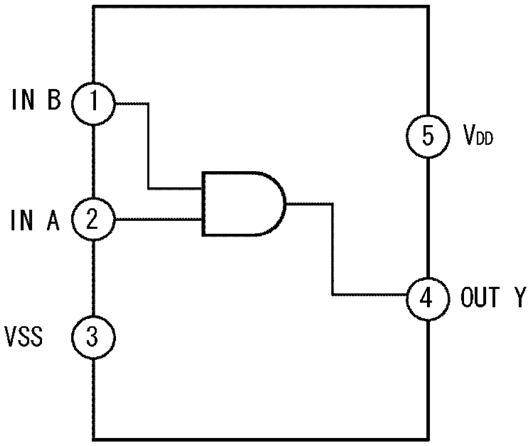
IC271 : C1EA00000021


DRIVER
DRIVER
DRIVER
DRIVER
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
TAB
GND
OUT2–
STNBY
OUT2+
VCC
OUT1–
GND
OUT1+
SVR
IN1
IN2
S-GND
IN4
IN3
AC-GND
OUT3+
GND
OUT3–
VCC
OUT4+
MUTE
OUT4–
GND
N.C.

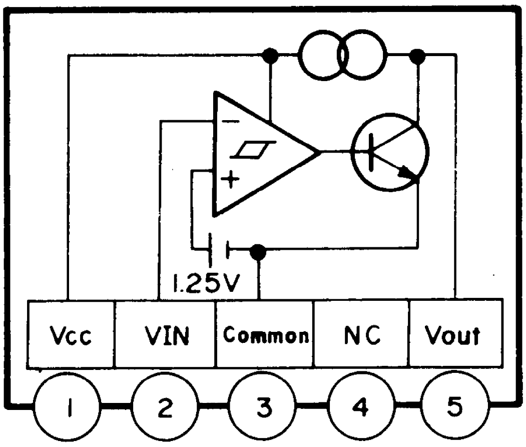
IC650 : YEAMTC4584FN


VDD
A6
Y6
A5
Y5
A4
Y4
14
13
12
11
10
9
8
1
2
3
4
5
6
7
A1
Y1
A2
Y2
A3
Y3
VSS

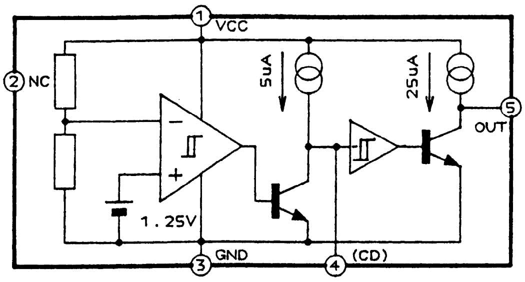
IC681 : TC7SET08E


IN B
1
IN A
2
VSS
3
5
VDD
4
OUT Y

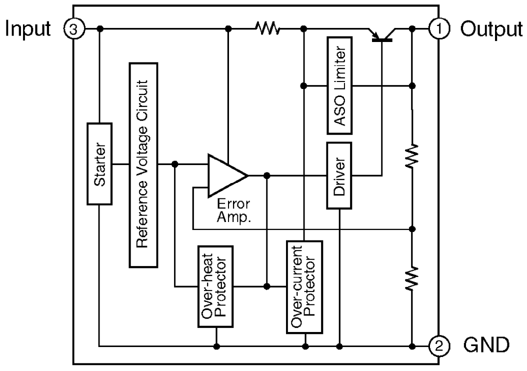
IC701 : C0EAB0000002


1.25V
Vcc
VIN
Common
NC
Vout
1
2
3
4
5

IC702 : C0EAH0000025

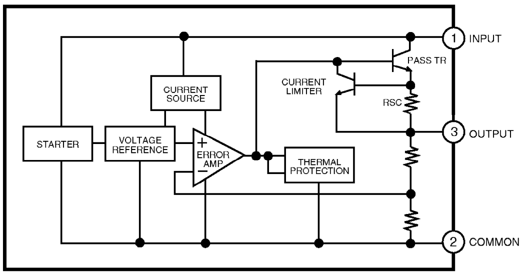

1
VCC
2
NC
5uA
25uA
5
OUT
1.25V
3
GND
4
(CD)

IC719 : YESAM158


Input
3
1
Output
Starter
Reference Voltage Circuit
Error Amp.
ASO Limiter
Driver
Over-heat Protector
Over-current Protector
2
GND

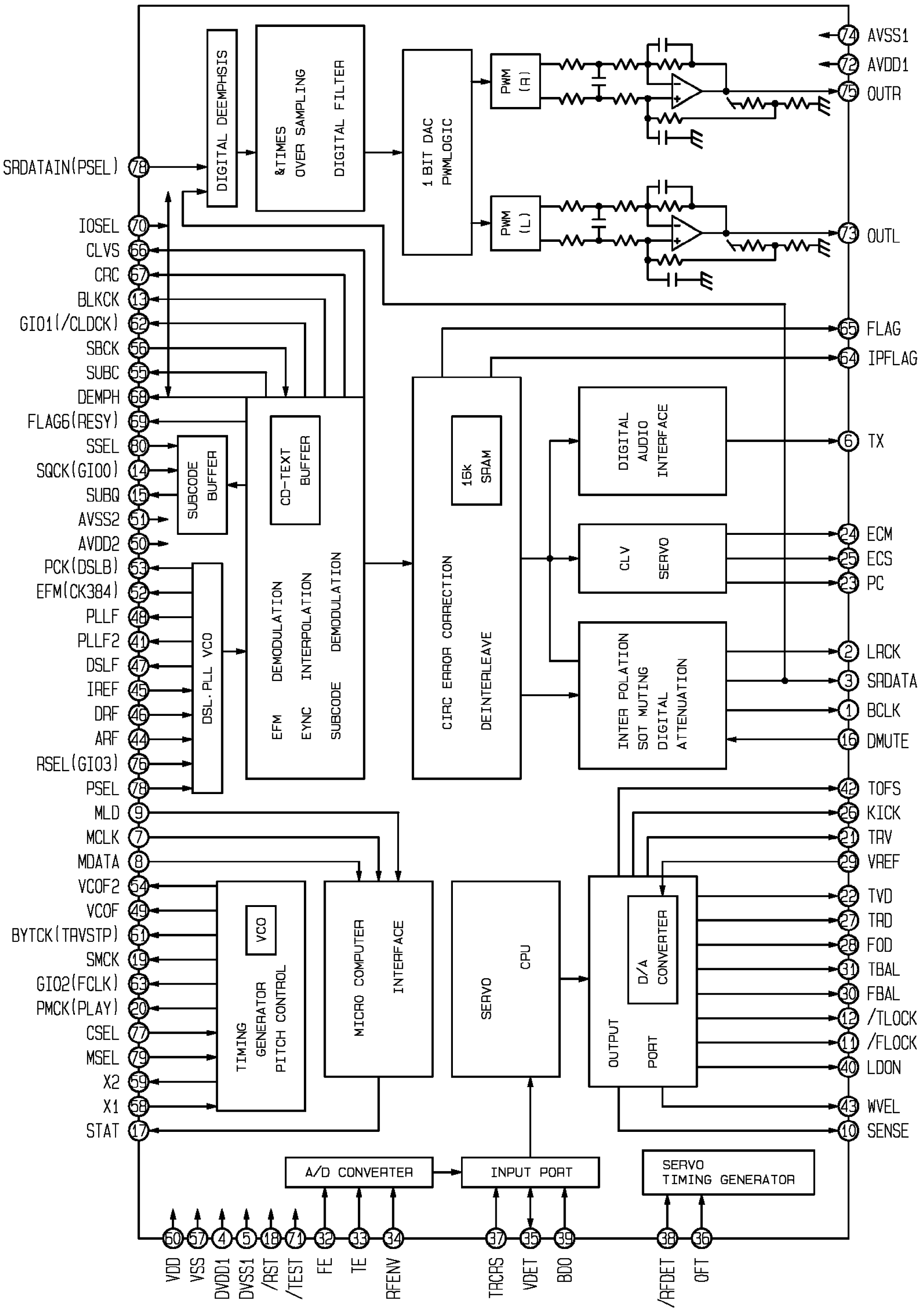
IC781 : C0CAAHF00001 / IC783 : YESAM164 (CQ-DFX683N) / IC783 : YESAM159 (CQ-DFX223N/

213N/203N)

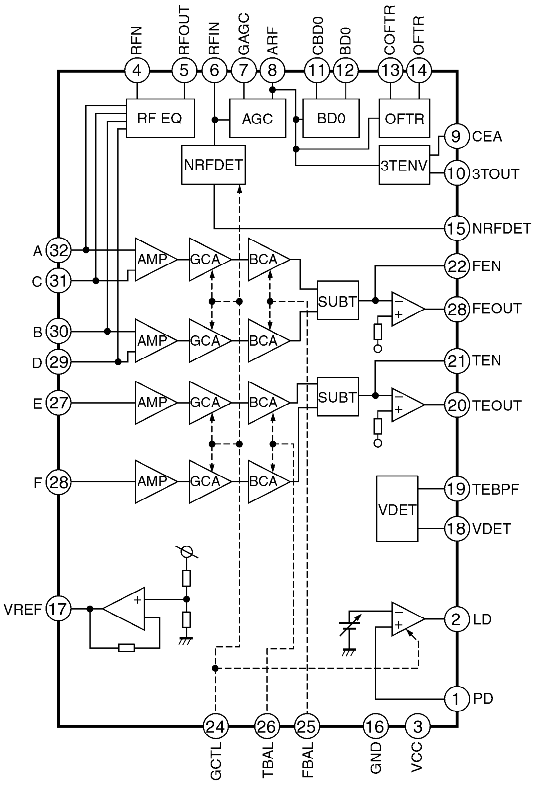

1
INPUT
PASS TR
CURRENT LIMITER
RSC
3
OUTPUT
CURRENT SOURCE
STARTER
VOLTAGE REFERENCE
+
ERROR AMP
−
THERMAL PROTECTION
2
COMMON

10.2. CD Servo Block [CQ-DFX683N]

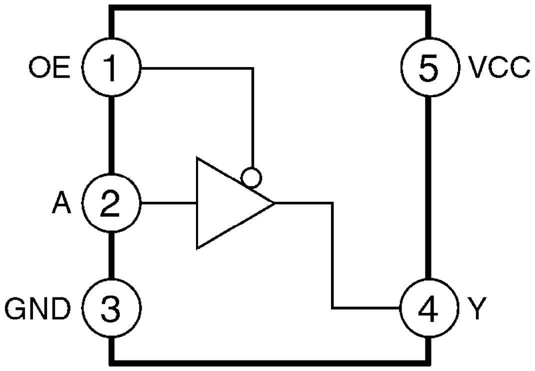
IC201 : MN6627482WB


AVSS1 74
AVDD1 72
OUTR 75
OUTL 73
DIGITAL DEEMPHSIS
&TIMES OVER SAMPLING DIGITAL FILTER
1 BIT DAC PWMLOGIC
PWM (R)
PWM (L)
SRDATAIN(PSEL) 78
IOSEL 70
CLVS 66
CRC 67
BLKCK 13
GIO1(/CLDCK) 62
SBCK 56
SUBC 55
DEMPH 68
FLAG6(RESY) 69
SSEL 80
SQCK(GIO0) 14
SUBQ 15
AVSS2 51
AVDD2 50
PCK(DSLB) 53
EFM(CK384) 52
PLLF 48
PLLF2 41
DSLF 47
IREF 45
DRF 46
ARF 44
RSEL(GIO3) 76
PSEL 78
MLD 9
MCLK 7
MDATA 8
VCOF2 54
VCOF 49
BYTCK(TRVSTP) 61
SMCK 19
GIO2(FCLK) 63
PMCK(PLAY) 20
CSEL 77
MSEL 79
X2 59
X1 58
STAT 17
FLAG 65
IPFLAG 64
TX 6
ECM 24
ECS 25
PC 23
LRCK 2
SRDATA 3
BCLK 1
DMUTE 16
TOFS 42
KICK 26
TRV 21
VREF 29
TVD 22
TRD 27
FOD 28
TBAL 31
FBAL 30
/TLOCK 12
/FLOCK 11
LDON 40
WVEL 43
SENSE 10
SUBCODE BUFFER
CD-TEXT BUFFER
EFM DEMODULATION
EYNC INTERPOLATION
SUBCODE DEMODULATION
DSL.PLL VCO
16k SRAM
CIRC ERROR CORRECTION
DEINTERLEAVE
DIGITAL AUDIO INTERFACE
CLV SERVO
INTER POLATION SOT MUTING DIGITAL ATTENUATION
VCO
TIMING GENERATOR PITCH CONTROL
MICRO COMPUTER INTERFACE
SERVO CPU
D/A CONVERTER
OUTPUT PORT
A/D CONVERTER
INPUT PORT
SERVO TIMING GENERATOR
60 VDD
57 VSS
4 DVDD1
5 DVSS1
18 /RST
71 /TEST
32 FE
33 TE
34 RFENV
37 TRCRS
35 VDET
39 BDO
38 /RFDET
36 OFT

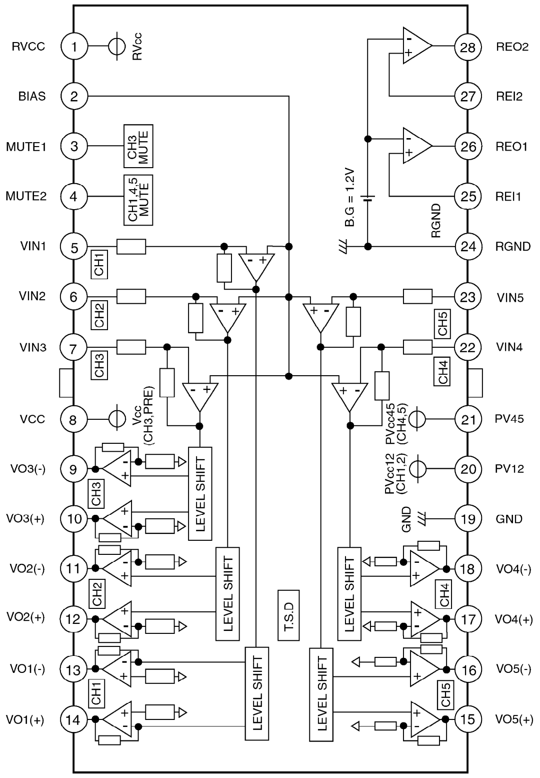
IC202 : YESAM163


RFN
RFOUT
RFIN
GAGC
ARF
CBD0
BD0
COFTR
OFTR
4
5
6
7
8
11
12
13
14
RF EQ
AGC
BD0
OFTR
9 CEA
3TENV
10 3TOUT
NRFDET
15 NRFDET
A 32
C 31
B 30
D 29
E 27
F 28
AMP
GCA
BCA
SUBT
22 FEN
28 FEOUT
21 TEN
20 TEOUT
VDET
19 TEBPF
18 VDET
VREF 17
2 LD
1 PD
24
26
25
16
3
GCTL
TBAL
FBAL
GND
VCC

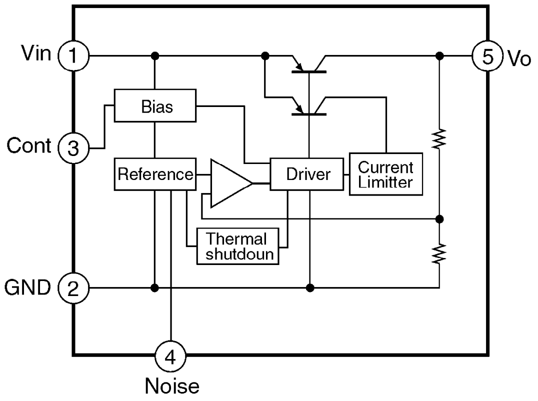
IC409 : YESAM167


OE
1
A
2
GND
3
5
VCC
4
Y

IC203 : YESAM166

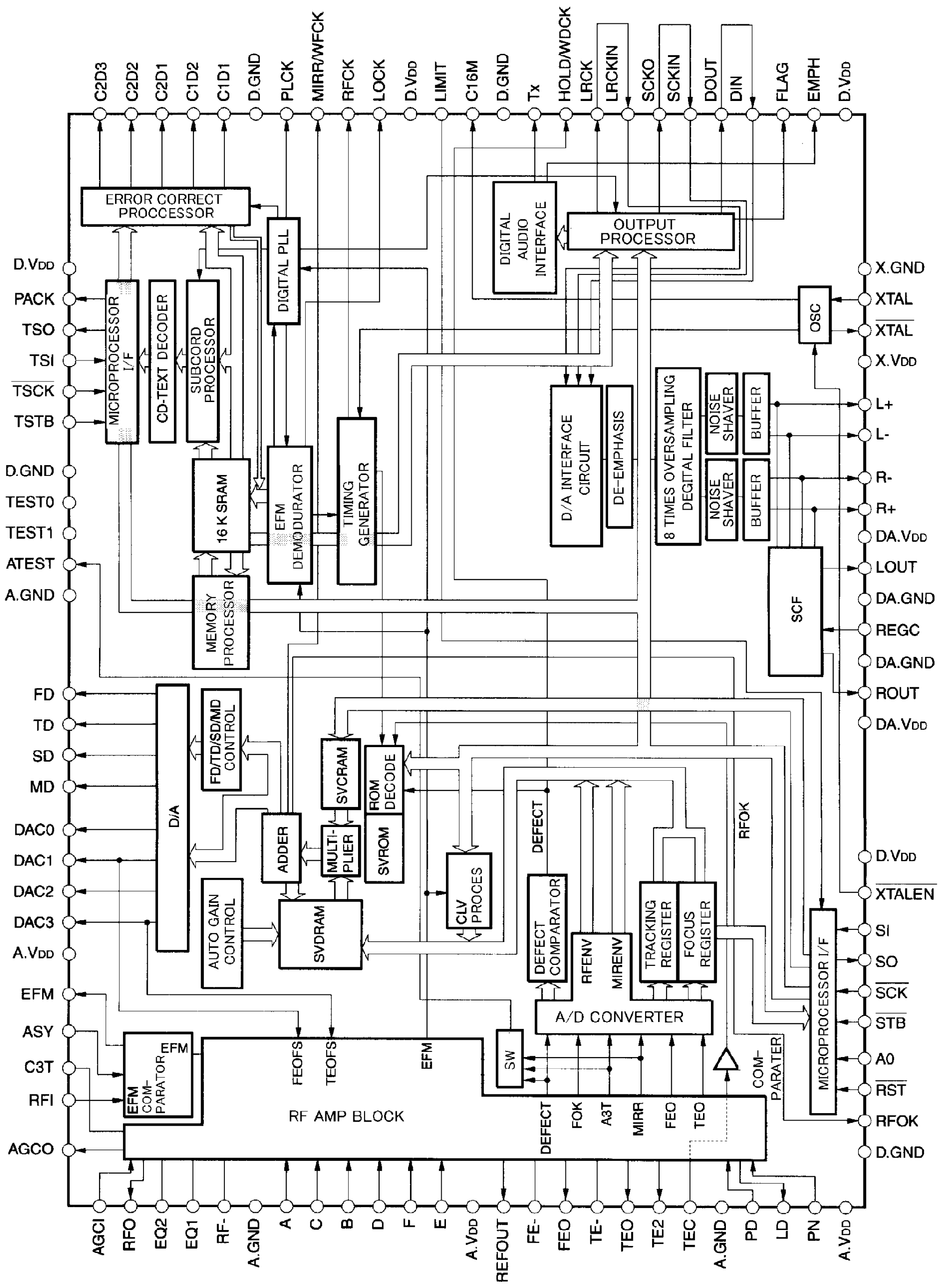

RVCC
1
RVcc
BIAS
2
MUTE1
3
CH3 MUTE
MUTE2
4
CH1,4,5 MUTE
VIN1
5
CH1
VIN2
6
CH2
VIN3
7
CH3
VCC
8
Vcc (CH3,PRE)
VO3(-)
9
VO3(+)
10
CH3
LEVEL SHIFT
VO2(-)
11
VO2(+)
12
CH2
LEVEL SHIFT
VO1(-)
13
VO1(+)
14
CH1
LEVEL SHIFT
T.S.D
LEVEL SHIFT
LEVEL SHIFT
B.G = 1.2V
RGND
REO2
28
REI2
27
REO1
26
REI1
25
RGND
24
VIN5
23
CH5
VIN4
22
CH4
PV45
21
PVcc45 (CH4,5)
PV12
20
PVcc12 (CH1,2)
GND
19
GND
VO4(-)
18
VO4(+)
17
CH4
VO5(-)
16
VO5(+)
15
CH5

IC411 : YESAM178

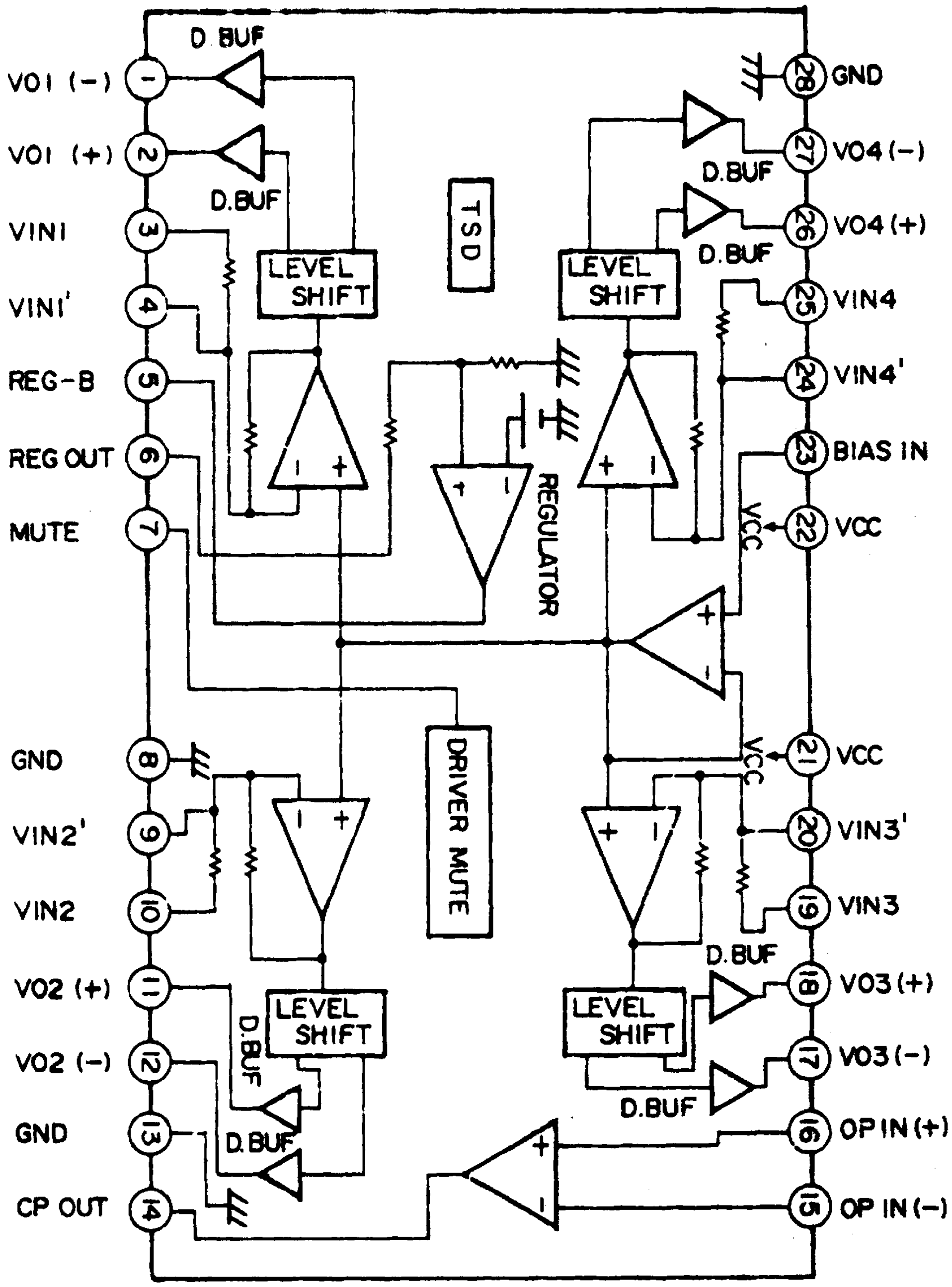

Vin
1
Cont
3
GND
2
4
Noise
5
Vo
Bias
Reference
Driver
Current Limitter
Thermal shutdoun

10.3. CD Servo Block [CQ-DFX223N/DFX213N/DFX203N]

IC1 : C1BB00000665


C2D3
C2D2
C2D1
C1D2
C1D1
D.GND
PLCK
MIRR/WFCK
RFCK
LOCK
D.VDD
LIMIT
C16M
D.GND
Tx
HOLD/WDCK
LRCK
LRCKIN
SCKO
SCKIN
DOUT
DIN
FLAG
EMPH
D.VDD
D.VDD
PACK
TSO
TSI
TSCK
TSTB
D.GND
TEST0
TEST1
ATEST
A.GND
FD
TD
SD
MD
DAC0
DAC1
DAC2
DAC3
A.VDD
EFM
ASY
C3T
RFI
AGCO
X.GND
XTAL
XTAL
X.VDD
L+
L-
R-
R+
DA.VDD
LOUT
DA.GND
REGC
DA.GND
ROUT
DA.VDD
D.VDD
XTALEN
SI
SO
SCK
STB
A0
RST
RFOK
D.GND
AGCI
RFO
EQ2
EQ1
RF-
A.GND
A
C
B
D
F
E
A.VDD
REFOUT
FE-
FEO
TE-
TEO
TE2
TEC
A.GND
PD
LD
PN
A.VDD
ERROR CORRECT PROCCESSOR
DIGITAL PLL
DIGITAL AUDIO INTERFACE
OUTPUT PROCESSOR
MICROPROCESSOR I/F
CD-TEXT DECODER
SUBCORD PROCESSOR
OSC
16 K SRAM
EFM DEMODURATOR
TIMING GENERATOR
D/A INTERFACE CIRCUIT
DE-EMPHASIS
8 TIMES OVERSAMPLING DEGITAL FILTER
NOISE SHAVER
BUFFER
NOISE SHAVER
BUFFER
SCF
MEMORY PROCESSOR
D/A
FD/TD/SD/MD CONTROL
SVCRAM
ROM DECODE
SVROM
ADDER
MULTI-PLIER
DEFECT
RFOK
CLV PROCES
SVDRAM
AUTO GAIN CONTROL
DEFECT COMPARATOR
RFENV
MIRENV
TRACKING REGISTER
FOCUS REGISTER
MICROPROCESSOR I/F
A/D CONVERTER
SW
EFM
EFM COM-PARATOR
FEOFS
TEOFS
EFM
RF AMP BLOCK
COM-PARATER
DEFECT
FOK
A3T
MIRR
FEO
TEO

IC4 : C0GBY0000020


D BUF
VO1 (−)
VO1 (+)
D.BUF
VIN1
VIN1'
REG-B
REG OUT
MUTE
GND
VIN2'
VIN2
VO2 (+)
VO2 (−)
GND
CP OUT
1
2
3
4
5
6
7
8
9
10
11
12
13
14
LEVEL SHIFT
TSD
REGULATOR
LEVEL SHIFT
D.BUF
D.BUF
DRIVER MUTE
VCC
VCC
LEVEL SHIFT
LEVEL SHIFT
D.BUF
D.BUF
D.BUF
D.BUF
28
27
26
25
24
23
22
21
20
19
18
17
16
15
GND
VO4 (−)
VO4 (+)
VIN4
VIN4'
BIAS IN
VCC
VCC
VIN3'
VIN3
VO3 (+)
VO3 (−)
OP IN (+)
OP IN (−)

11. REPLACEMENT PARTS LIST[CQ-DFX683N]

Notes :

1. **Be sure to make your orders of replacement parts according to this list.**
2. **Important safety notice: Components, identified by ⚠ mark have special characteristics important for safety. When replacing any of these components, use only manufacturer's specified parts.**

3. **Location keys in the remarks column indicates the general location of the parts shown in the exploded drawing, as in a road map.**
4. **The marking (RTL) indicates that Retention Time is limited for this item. After the discontinuation of assembly in production, the item will continue to be available for a specific period of time. The retention period of availability is dependent on the type of assembly, and in accordance with the laws governing part and product retention. After the end of this period, the assembly will no longer be available.**

    - Order intake period is basically six months after the first shipment.

Ref. No.	Part No.	Part Name & Description	Remarks
[7201-02-11A] Main Block			
IC's and Transistors			
IC201	C1BB00000543	IC	
IC271	C1EA00000021	IC	
IC280	C0ABBB000073	IC	
IC401	C1BB00000644	IC	
IC501	YESAM179	IC	
IC601	YESAM181	IC	
IC650	YEAMTC4584FN	IC	
IC681	TC7SET08F	IC	
IC701	C0EAB0000002	IC	
IC702	C0EAH0000025	IC	
IC719	YESAM158	IC	
IC761	C0CAAHF00001	IC	
IC781	C0CAAHF00001	IC	
IC783	YESAM164	IC	
PA51	YESAP263	Electronic Tuner	
Q52	B1GDCFNN0002	Transistor	
Q54	B1GBCFNN0004	Transistor	
Q55	B1GBNCEJ0001	Transistor	
Q66	YESAN063	Transistor	
Q262	B1GBHBEA0004	Transistor	
Q266	B1GBHBEA0004	Transistor	
Q362	B1GBHBEA0004	Transistor	
Q366	B1GBHBEA0004	Transistor	
Q411	B1CBGF000001	FET	
Q642	B1GBCFNN0004	Transistor	
Q644	B1GDCFJN0004	Transistor	
Q645	B1GDCFJN0004	Transistor	
Q646	B1GBCFNN0004	Transistor	
Q660	YEANFP1F3PT1	Transistor	
Q661	B1GDCFJA0001	Transistor	
Q670	B1GDCFJJ0002	Transistor	

Ref. No.	Part No.	Part Name & Description	Remarks
Q681	B1GBCFJN0004	Transistor	
Q701	YESAN058	Transistor	
Q703	B1BCCF000017	Transistor	
Q704	B1GDJCEJ0001	Transistor	
Q705	YESAN058	Transistor	
Q708	YESAN059	Transistor	
Q709	B1BAAJ000005	Transistor	
Q720	B1GBNCEJ0001	Transistor	
Q721	B1GBCFJN0004	Transistor	
Q760	B1GBCFJN0004	Transistor	
Q761	B1BCCF000017	Transistor	
Q781	B1BCCF000017	Transistor	
Q782	B1GBCFJN0004	Transistor	
DIODEs			
D270	YESAD098	Diode	
D271	YESAD098	Diode	
D272	YESAD098	Diode	
D273	YESAD098	Diode	
D274	YESAD098	Diode	
D275	YESAD098	Diode	
D276	YESAD098	Diode	
D277	YESAD098	Diode	
D504	B0BC5R000004	Zener Diode	
D601	LN25RP	LED	
D603	MA3X152A0L	Diode	
D650	MA3X152A0L	Diode	
D676	MA3X152D0L	Diode	
D680	MA3X152A0L	Diode	
D681	B0BC5R000004	Zener Diode	
D682	YESAD101	Diode	
D702	B0EANM000001	Diode	
D703	YESAD096	Zener Diode	
D705	MA3X70400R	Diode	
D706	B0EAMM000001	Diode	
D707	B0JCPE000004	Diode	
D708	YESAD097	Zener Diode	
D709	MA3X72100L	Diode	
D710	B0BC5R000004	Zener Diode	
D711	YESAD096	Zener Diode	
D713	B0EANM000001	Diode	
D714	YESAD095	Zener Diode	
D719	YESAD102	Diode	
CAPACITORs			
C51	YESCC225	Ceramic, 47pF 50WV	
C53	YESCC234	Ceramic, 0.01 μ F 50WV	
C54	ECA1AM331I	Electrolytic, 330 μ F 10WV	
C55	YESCC234	Ceramic, 0.01 μ F 50WV	
C56	YESCC219	Ceramic, 10pF 50WV	
C61	YESCC236	Ceramic, 0.018 μ 50WV	

Ref. No.	Part No.	Part Name & Description	Remarks
C62	YESCC236	Ceramic, 0.018 μ 50WV	
C65	YESCC233	Ceramic, 1000pF 50WV	
C66	YESCC226	Ceramic, 470pF 50WV	
C201	F1J1H681A025	Ceramic, 680pF 50WV	
C202	F1J1H681A025	Ceramic, 680pF 50WV	
C203	ECEA1HKA3R3I	Electrolytic, 3.3 μ F 50WV	
C204	YESCC191	Ceramic, 2.2 μ F	
C206	YESCC191	Ceramic, 2.2 μ F	
C207	YESCC228	Ceramic, 0.1 μ F 16WV	
C208	YESCC230	Ceramic, 0.33 μ F 16WV	
C209	YESCC191	Ceramic, 2.2 μ F	
C210	YESCC228	Ceramic, 0.1 μ F 16WV	
C212	YESCC228	Ceramic, 0.1 μ F 16WV	
C220	ECEA1HKA2R2I	Electrolytic, 2.2 μ F 50WV	
C261	ECEA1HKA4R7I	Electrolytic, 4.7 μ F 50WV	
C263	ECEA1HKA010I	Electrolytic, 1 μ F 50WV	
C264	ECEA1HKA010I	Electrolytic, 1 μ F 50WV	
C265	ECEA1HKA4R7I	Electrolytic, 4.7 μ F 50WV	
C267	ECEA1HKA010I	Electrolytic, 1 μ F 50WV	
C268	ECEA1HKA010I	Electrolytic, 1 μ F 50WV	
C271	YESCC235	Ceramic, 4700pF 50WV	
C272	YESCC235	Ceramic, 4700pF 50WV	
C275	ECEA1HKA2R2I	Electrolytic, 2.2 μ F 50WV	
C276	ECEA1AKS101I	Electrolytic, 100 μ F 10WV	
C277	ECA1HHG010I	Electrolytic, 1 μ F 50WV	
C278	YESCC228	Ceramic, 0.1 μ F 16WV	
C279	ECA1CDT472Y	Electrolytic, 4700 μ F 16WV	
C280	YESCC228	Ceramic, 0.1 μ F 16WV	
C282	ECEA1AKA220I	Electrolytic, 22 μ F 10WV	
C284	YESCC231	Ceramic, 0.022 μ F 25WV	
C301	F1J1H681A025	Ceramic, 680pF 50WV	
C302	F1J1H681A025	Ceramic, 680pF 50WV	
C303	ECEA1HKA3R3I	Electrolytic, 3.3 μ F 50WV	
C304	YESCC191	Ceramic, 2.2 μ F	
C306	YESCC191	Ceramic, 2.2 μ F	
C308	YESCC230	Ceramic, 0.33 μ F 16WV	
C309	ECEA1CKA100I	Electrolytic, 10 μ F 16WV	
C310	ECEA1AKS221I	Electrolytic, 220 μ F 10WV	
C320	ECEA1HKA2R2I	Electrolytic, 2.2 μ F 50WV	
C325	YESCC222	Ceramic, 220pF 50WV	
C361	ECEA1HKA4R7I	Electrolytic, 4.7 μ F 50WV	
C363	ECEA1HKA010I	Electrolytic, 1 μ F 50WV	
C364	ECEA1HKA010I	Electrolytic, 1 μ F 50WV	
C365	ECEA1HKA4R7I	Electrolytic, 4.7 μ F 50WV	
C367	ECEA1HKA010I	Electrolytic, 1 μ F 50WV	
C368	ECEA1HKA010I	Electrolytic, 1 μ F 50WV	

Ref. No.	Part No.	Part Name & Description	Remarks
C371	YESCC235	Ceramic, 4700pF 50WV	
C372	YESCC235	Ceramic, 4700pF 50WV	
C375	ECEA1CKA100I	Electrolytic, 10 μF 16WV	
C378	YESCC228	Ceramic, 0.1 μF 16WV	
C381	YESCC233	Ceramic, 1000pF 50WV	
C401	C2012CH1H150J	Ceramic, 15pF 50WV	
C402	C2012CH1H150J	Ceramic, 15pF 50WV	
C403	ECEA0JKA101I	Electrolytic, 100 μF 6.3WV	
C404	YESCC234	Ceramic, 0.01 μF 50WV	
C405	YESCC220	Ceramic, 100pF 50WV	
C411	YESCC234	Ceramic, 0.01 μF 50WV	
C412	YESCC231	Ceramic, 0.022 μF 25WV	
C413	ECQV1H224JL2	Film, 0.22 μF 50WV	
C417	ECEA1AKS221I	Electrolytic, 220 μF 10WV	
C418	ECEA1AKS221I	Electrolytic, 220 μF 10WV	
C419	ECEA1AKS221I	Electrolytic, 220 μF 10WV	
C420	YESCC193	Ceramic, 47pF 50WV	
C421	YESCC193	Ceramic, 47pF 50WV	
C501	YESCC223	Ceramic, 27pF 50WV	
C502	YESCC219	Ceramic, 10pF 50WV	
C504	ECEA1CKA470I	Electrolytic, 47 μF 16WV	
C505	YESCC228	Ceramic, 0.1 μF 16WV	
C506	YESCC234	Ceramic, 0.01 μF 50WV	
C507	YESCC224	Ceramic, 270pF 50WV	
C508	ECEA1CKA100I	Electrolytic, 10 μF 16WV	
C601	EECS0HD473H	Electrolytic, 0.047 μF 5.5WV	
C602	ECEA0JKA331I	Electrolytic, 330 μF 6.3WV	
C605	YESCC234	Ceramic, 0.01 μF 50WV	
C624	YESCC228	Ceramic, 0.1 μF 16WV	
C628	YESCC228	Ceramic, 0.1 μF 16WV	
C631	YESCC229	Ceramic, 1 μF 16WV	
C634	YESCC221	Ceramic, 22pF 50WV	
C635	YESCC221	Ceramic, 22pF 50WV	
C636	YESCC234	Ceramic, 0.01 μF 50WV	
C651	YESCC234	Ceramic, 0.01 μF 50WV	
C660	ECEA1HKA2R2I	Electrolytic, 2.2 μF 50WV	
C674	ECEA1AKS221I	Electrolytic, 220 μF 10WV	
C675	YESCC234	Ceramic, 0.01 μF 50WV	
C680	ECSH1CY225R	Tantalum, 2.2 μF 16WV	
C681	YESCC228	Ceramic, 0.1 μF 16WV	
C683	ECEA1HKA4R7I	Electrolytic, 4.7 μF 50WV	
C687	ECEA1CKA470I	Electrolytic, 47 μF 16WV	
C688	YESCC228	Ceramic, 0.1 μF 16WV	
C701	YESCC192	Electrolytic, 220 μF 16WV	
C702	ECEA1HKA4R7I	Electrolytic, 4.7 μF 50WV	
C704	ECEA0JKA470I	Electrolytic, 47 μF 6.3WV	
C705	ECEA1HKA010I	Electrolytic, 1 μF 50WV	

Ref. No.	Part No.	Part Name & Description	Remarks
C708	ECEA1AKS221I	Electrolytic, 220 μ F 10WV	
C710	ECEA1AKS101I	Electrolytic, 100 μ F 10WV	
C711	ECEA0JKA470I	Electrolytic, 47 μ F 6.3WV	
C713	YESCC228	Ceramic, 0.1 μ F 16WV	
C715	ECA1CDT102UB	Electrolytic, 1000 μ F 16WV	
C717	YESCC228	Ceramic, 0.1 μ F 16WV	
C718	YESCC228	Ceramic, 0.1 μ F 16WV	
C719	EEAFC1A820H	Electrolytic, 82 μ F 10WV	
C720	ECEA1CKA101I	Electrolytic, 100 μ F 16WV	
C721	ECEA0JKA470I	Electrolytic, 47 μ F 6.3WV	
C752	YESCC228	Ceramic, 0.1 μ F 16WV	
C768	ECA1EHG470I	Electrolytic, 47 μ F 25WV	
C769	YESCC232	Ceramic, 0.22 μ 25WV	
C770	YESCC232	Ceramic, 0.22 μ 25WV	
C771	EEAFC1A820H	Electrolytic, 82 μ F 10WV	
C781	YESCC232	Ceramic, 0.22 μ 25WV	
C782	YESCC232	Ceramic, 0.22 μ 25WV	
C783	ECEA1AKS101I	Electrolytic, 100 μ F 10WV	
C786	YESCC228	Ceramic, 0.1 μ F 16WV	
C787	EEAFC1A820H	Electrolytic, 82 μ F 10WV	
C788	YESCC228	Ceramic, 0.1 μ F 16WV	
C789	ECEA1AKS101I	Electrolytic, 100 μ F 10WV	
C791	YESCC228	Ceramic, 0.1 μ F 16WV	
C792	YESCC218	Ceramic, 0.033 μ F 25WV	
C793	YESCC232	Ceramic, 0.22 μ 25WV	
C794	YESCC228	Ceramic, 0.1 μ F 16WV	
C795	ECEA1AKS221I	Electrolytic, 220 μ F 10WV	
C796	ECEA1AKS221I	Electrolytic, 220 μ F 10WV	
C797	YESCC234	Ceramic, 0.01 μ F 50WV	
C798	YESCC228	Ceramic, 0.1 μ F 16WV	
RESISTORs			
FB201	ERJ6GEY0R00V	Chip, 0 Ω 1/10W	
FB202	ERJ6GEY0R00V	Chip, 0 Ω 1/10W	
FB301	ERJ6GEY0R00V	Chip, 0 Ω 1/10W	
FB302	ERJ6GEY0R00V	Chip, 0 Ω 1/10W	
J001	ERJ8GEY0R00V	Chip, 0 Ω 1/8W	
J002	ERJ8GEY0R00V	Chip, 0 Ω 1/8W	
J201	ERJ8GEY0R00V	Chip, 0 Ω 1/8W	
J204	ERJ8GEY0R00V	Chip, 0 Ω 1/8W	
J205	ERJ8GEY0R00V	Chip, 0 Ω 1/8W	
J207	ERJ8GEY0R00V	Chip, 0 Ω 1/8W	
J208	ERJ8GEY0R00V	Chip, 0 Ω 1/8W	
J302	ERJ6GEY0R00V	Chip, 0 Ω 1/10W	
J303	ERJ6GEY0R00V	Chip, 0 Ω 1/10W	
J50	ERJ6GEY0R00V	Chip, 0 Ω 1/10W	

Ref. No.	Part No.	Part Name & Description	Remarks
JP003	ERJ6GEY0R00V	Chip, 0 Ω 1/10W	
L61	ERJ6GEY0R00V	Chip, 0 Ω 1/10W	
L62	ERJ6GEY0R00V	Chip, 0 Ω 1/10W	
L291	ERJ6GEY0R00V	Chip, 0 Ω 1/10W	
L298	ERJ6GEY0R00V	Chip, 0 Ω 1/10W	
L398	ERJ6GEY0R00V	Chip, 0 Ω 1/10W	
R50	ERJ6GEY0R00V	Chip, 0 Ω 1/10W	
R51	ERJ6GEYJ5R6V	Chip, 5.6 Ω 1/10W	
R52	ERJ6GEYJ101	Chip, 100 Ω 1/10W	
R53	ERJ6GEYJ221V	Chip, 220 Ω 1/10W	
R59	ERJ6GEYJ104	Chip, 100k Ω 1/10W	
R65	ERJ6GEYJ393	Chip, 39k Ω 1/10W	
R66	ERJ6GEYJ334	Chip, 330k Ω 1/10W	
R67	ERJ6GEYJ222	Chip, 2.2k Ω 1/10W	
R68	ERJ6GEYJ102	Chip, 1k Ω 1/10W	
R201	ERJ6GEYJ102	Chip, 1k Ω 1/10W	
R202	ERJ6GEYJ102	Chip, 1k Ω 1/10W	
R203	ERJ6GEYJ393	Chip, 39k Ω 1/10W	
R204	ERJ6GEYJ562	Chip, 5.6k Ω 1/10W	
R205	ERJ6GEYJ103	Chip, 10k Ω 1/10W	
R207	ERJ6GEYJ123	Chip, 12k Ω 1/10W	
R208	ERJ6GEYJ363V	Chip, 36k Ω 1/10W	
R225	ERJ6GEYJ102	Chip, 1k Ω 1/10W	
R226	ERJ6GEYJ102	Chip, 1k Ω 1/10W	
R227	ERJ6GEYJ123	Chip, 12k Ω 1/10W	
R251	ERJ6GEY0R00V	Chip, 0 Ω 1/10W	
R257	ERJ6GEY0R00V	Chip, 0 Ω 1/10W	
R261	ERJ6GEYJ181	Chip, 180 Ω 1/10W	
R262	ERJ6GEYJ103	Chip, 10k Ω 1/10W	
R263	ERJ6GEYJ561	Chip, 560 Ω 1/10W	
R265	ERJ6GEYJ181	Chip, 180 Ω 1/10W	
R266	ERJ6GEYJ103	Chip, 10k Ω 1/10W	
R267	ERJ6GEYJ561	Chip, 560 Ω 1/10W	
R268	ERJ6GEY0R00V	Chip, 0 Ω 1/10W	
R269	ERJ6GEY0R00V	Chip, 0 Ω 1/10W	
R275	ERJ6GEYJ223	Chip, 22k Ω 1/10W	
R280	ERJ6GEYJ104	Chip, 100k Ω 1/10W	
R283	ERJ6GEYJ123	Chip, 12k Ω 1/10W	
R301	ERJ6GEYJ102	Chip, 1k Ω 1/10W	
R302	ERJ6GEYJ102	Chip, 1k Ω 1/10W	
R303	ERJ6GEYJ393	Chip, 39k Ω 1/10W	
R304	ERJ6GEYJ562	Chip, 5.6k Ω 1/10W	
R305	ERJ6GEYJ103	Chip, 10k Ω 1/10W	
R307	ERJ6GEYJ123	Chip, 12k Ω 1/10W	
R308	ERJ6GEYJ363V	Chip, 36k Ω 1/10W	
R325	ERJ6GEYJ103	Chip, 10k Ω 1/10W	
R326	ERJ6GEYJ103	Chip, 10k Ω 1/10W	
R351	ERJ6GEY0R00V	Chip, 0 Ω 1/10W	
R357	ERJ6GEY0R00V	Chip, 0 Ω 1/10W	
R361	ERJ6GEYJ181	Chip, 180 Ω 1/10W	
R362	ERJ6GEYJ103	Chip, 10k Ω 1/10W	

Ref. No.	Part No.	Part Name & Description	Remarks
R363	ERJ6GEYJ561	Chip, 560 Ω 1/10W	
R365	ERJ6GEYJ181	Chip, 180 Ω 1/10W	
R366	ERJ6GEYJ103	Chip, 10k Ω 1/10W	
R367	ERJ6GEYJ561	Chip, 560 Ω 1/10W	
R368	ERJ6GEY0R00V	Chip, 0 Ω 1/10W	
R369	ERJ6GEY0R00V	Chip, 0 Ω 1/10W	
R375	ERJ6GEYJ123	Chip, 12k Ω 1/10W	
R381	ERJ6GEYJ473	Chip, 47k Ω 1/10W	
R382	ERJ6GEYJ472	Chip, 4.7k Ω 1/10W	
R383	ERJ6GEYJ473	Chip, 47k Ω 1/10W	
R384	ERJ6GEYJ103	Chip, 10k Ω 1/10W	
R401	ERJ6GEYJ152	Chip, 1.5k Ω 1/10W	
R402	ERJ6GEYJ222	Chip, 2.2k Ω 1/10W	
R403	ERJ6GEYJ473	Chip, 47k Ω 1/10W	
R408	ERJ6GEYJ473	Chip, 47k Ω 1/10W	
R413	ERJ6GEYJ182	Chip, 1.8k Ω 1/10W	
R414	ERJ6GEYJ561	Chip, 560 Ω 1/10W	
R417	ERJ6GEYJ100	Chip, 10ohm; 1/10W	
R418	ERJ6GEYJ102	Chip, 1k Ω 1/10W	
R419	ERJ6GEYJ102	Chip, 1k Ω 1/10W	
R420	ERJ6GEYJ102	Chip, 1k Ω 1/10W	
R421	ERJ6GEYJ102	Chip, 1k Ω 1/10W	
R422	ERJ6GEYJ102	Chip, 1k Ω 1/10W	
R423	ERJ6GEYJ102	Chip, 1k Ω 1/10W	
R424	ERJ6GEYJ221V	Chip, 220 Ω 1/10W	
R425	ERJ6GEYJ221V	Chip, 220 Ω 1/10W	
R501	ERJ6GEYJ225V	Chip, 2.2M 1/10W	
R504	ERJ6GEYJ331	Chip, 330 Ω 1/10W	
R506	ERJ6GEYJ103	Chip, 10k Ω 1/10W	
R507	ERJ6GEYJ103	Chip, 10k Ω 1/10W	
R510	ERJ6GEY0R00V	Chip, 0 Ω 1/10W	
R601	ERJ6GEYJ104	Chip, 100k Ω 1/10W	
R604	ERJ6GEYJ473	Chip, 47k Ω 1/10W	
R605	ERJ6GEYJ332	Chip, 3.3k Ω 1/10W	
R607	ERJ6GEYJ332	Chip, 3.3k Ω 1/10W	
R608	ERJ6GEYJ332	Chip, 3.3k Ω 1/10W	
R609	ERJ6GEYJ154	Chip, 150k Ω 1/10W	
R610	ERJ6GEYJ104	Chip, 100k Ω 1/10W	
R611	ERJ6GEYJ332	Chip, 3.3k Ω 1/10W	
R612	ERJ6GEYJ102	Chip, 1k Ω 1/10W	
R614	ERJ6GEYJ272	Chip, 2.7k Ω 1/10W	
R618	ERJ6GEYJ104	Chip, 100k Ω 1/10W	
R620	ERJ6GEYJ102	Chip, 1k Ω 1/10W	
R621	ERJ6GEYJ102	Chip, 1k Ω 1/10W	
R622	ERJ6GEYJ102	Chip, 1k Ω 1/10W	
R623	ERJ6GEYJ102	Chip, 1k Ω 1/10W	
R624	ERJ6GEYJ472	Chip, 4.7k Ω 1/10W	
R625	ERJ6GEYJ103	Chip, 10k Ω 1/10W	
R626	ERJ6GEYJ822	Chip, 8.2k Ω 1/10W	
R628	ERJ6GEYJ184	Chip, 180k Ω 1/10W	
R631	ERJ6GEY0R00V	Chip, 0 Ω 1/10W	

Ref. No.	Part No.	Part Name & Description	Remarks
R632	ERJ6GEY0R00V	Chip, 0 Ω 1/10W	
R633	ERJ6GEYJ472	Chip, 4.7k Ω 1/10W	
R634	ERJ6GEYJ564	Chip, 560k Ω 1/10W	
R635	ERJ6GEYJ822	Chip, 8.2k Ω 1/10W	
R636	ERJ6GEYJ333	Chip, 33k Ω 1/10W	
R638	ERJ6GEYJ102	Chip, 1k Ω 1/10W	
R640	ERJ6GEYJ473	Chip, 47k Ω 1/10W	
R641	ERJ6GEYJ473	Chip, 47k Ω 1/10W	
R642	ERJ6GEYJ681	Chip, 680 Ω 1/10W	
R643	ERJ6GEYJ102	Chip, 1k Ω 1/10W	
R644	ERJ6GEYJ511V	Chip, 510 Ω 1/10W	
R645	ERJ6GEYJ511V	Chip, 510 Ω 1/10W	
R650	ERJ6GEYJ104	Chip, 100k Ω 1/10W	
R651	ERJ6GEYJ104	Chip, 100k Ω 1/10W	
R652	ERJ6GEYJ104	Chip, 100k Ω 1/10W	
R653	ERJ6GEYJ104	Chip, 100k Ω 1/10W	
R656	ERJ6GEYJ104	Chip, 100k Ω 1/10W	
R657	ERJ6GEYJ104	Chip, 100k Ω 1/10W	
R658	ERJ8GEYJ152V	Chip, 1.5k Ω 1/8W	
R659	ERJ6GEYJ102	Chip, 1k Ω 1/10W	
R660	ERJ6GEYJ561	Chip, 560 Ω 1/10W	
R661	ERJ6GEYJ562	Chip, 5.6k Ω 1/10W	
R662	ERJ6GEYJ473	Chip, 47k Ω 1/10W	
R664	ERJ6GEYJ471	Chip, 470 Ω 1/10W	
R669	ERJ6GEYJ5R6V	Chip, 5.6 Ω 1/10W	
R670	ERJ6GEY0R00V	Chip, 0 Ω 1/10W	
R672	ERJ6GEYJ102	Chip, 1k Ω 1/10W	
R673	ERJ6GEYJ184	Chip, 180k Ω 1/10W	
R674	ERJ6GEYJ102	Chip, 1k Ω 1/10W	
R676	ERJ6GEYJ102	Chip, 1k Ω 1/10W	
R678	ERJ6GEYJ102	Chip, 1k Ω 1/10W	
R679	ERJ6GEYJ102	Chip, 1k Ω 1/10W	
R680	ERJ6GEYJ104	Chip, 100k Ω 1/10W	
R681	ERJ6GEYJ102	Chip, 1k Ω 1/10W	
R682	ERJ6GEYJ273	Chip, 27k Ω 1/10W	
R683	ERJ6GEYJ104	Chip, 100k Ω 1/10W	
R684	ERJ6GEYJ104	Chip, 100k Ω 1/10W	
R685	ERJ6GEYJ102	Chip, 1k Ω 1/10W	
R687	ERJ6GEYJ102	Chip, 1k Ω 1/10W	
R689	ERJ6GEY0R00V	Chip, 0 Ω 1/10W	
R690	ERJ6GEYJ272	Chip, 2.7k Ω 1/10W	
R692	ERJ6GEYJ102	Chip, 1k Ω 1/10W	
R694	ERJ6GEYJ272	Chip, 2.7k Ω 1/10W	
R695	ERJ6GEYJ272	Chip, 2.7k Ω 1/10W	
R700	ERJ6GEYJ104	Chip, 100k Ω 1/10W	
R701	ERJ8GEYJ100V	Chip, 10 Ω 1/8W	
R702	ERJ6GEYJ102	Chip, 1k Ω 1/10W	
R703	ERJ6GEYJ103	Chip, 10k Ω 1/10W	
R704	ERJ6GEYJ684	Chip, 680k Ω 1/10W	
R705	ERJ6GEYJ333	Chip, 33k Ω 1/10W	
R706	ERJ6GEYJ204V	Chip, 200k Ω 1/10W	

Ref. No.	Part No.	Part Name & Description	Remarks
R707	**ERJ6GEYJ123**	**Chip, 12k Ω 1/10W**	
R708	**ERJ6GEYJ113V**	**Chip, 11k Ω 1/10W**	
R709	**ERJ6GEYJ473**	**Chip, 47k Ω 1/10W**	
R710	**ERDS1FJ820**	**Chip, 82 Ω 1/2W**	
R711	**ERDS1FJ820**	**Chip, 82 Ω 1/2W**	
R712	**ERJ8GEYJ1R0V**	**Chip, 1 Ω 1/8W**	
R713	**ERJ8GEYJ1R0V**	**Chip, 1 Ω 1/8W**	
R714	**ERDS1FJ102**	**Chip, 1k Ω 1/2W**	
R718	**ERJ6GEY0R00V**	**Chip, 0 Ω 1/10W**	
R719	**ERDS2TJ681**	**Chip, 680 Ω 1/4W**	
R720	**ERJ6GEYJ362V**	**Chip, 3.6k Ω 1/10W**	
R722	**ERJ6GEY0R00V**	**Chip, 0 Ω 1/10W**	
R723	**ERJ8GEY0R00V**	**Chip, 0 Ω 1/8W**	
R733	**ERJ6GEYJ223**	**Chip, 22k Ω 1/10W**	
R759	**ERJ6GEYJ473**	**Chip, 47k Ω 1/10W**	
R771	**ERJ6GEY0R00V**	**Chip, 0 Ω 1/10W**	
R781	**ERJ6GEYJ473**	**Chip, 47k Ω 1/10W**	
R782	**ERDS1FJ680**	**Chip, 68 Ω 1/2W**	
R786	**ERJ8GEY0R00V**	**Chip, 0 Ω 1/8W**	
R806	**ERJ6GEYJ512**	**Chip, 5.1k Ω 1/10W**	
R807	**ERJ6GEYJ182**	**Chip, 1.8k Ω 1/10W**	
R808	**ERJ6GEYJ512**	**Chip, 5.1k Ω 1/10W**	
R809	**ERJ6GEYJ512**	**Chip, 5.1k Ω 1/10W**	
R810	**ERJ6GEYJ473**	**Chip, 47k Ω 1/10W**	
R812	**ERJ6GEYJ102**	**Chip, 1k Ω 1/10W**	
R817	**ERJ6GEYJ473**	**Chip, 47k Ω 1/10W**	
CONNECTORs			
J1	**K2HA104B0010**	**Jack, RCA**	
CN251	**YESAJ07008**	**2RCA (CD.C-IN)**	
CN601	**K1KB15B00010**	**Connector, 15P**	
CN602	**YESAE339**	**Connector, 4P**	
CN661	**YESAJ07007**	**Connector, 7P**	
CN680	**YESAE343**	**8P DIN Connector**	
CN681	**YESAE344**	**Connector, 18P**	
CN701	**K1FA116B0028**	**Connector, 16P**	
COILs			
L50	**YESLQ013**	**Coil**	
L51	**G1C150K00011**	**Coil**	
L401	**G0C101K00010**	**Coil**	
L501	**YESLA004**	**Coil**	
L504	**YESLA004**	**Coil**	
L671	**YESLQ012**	**Coil**	
L701	**J0JKA0000001**	**Coil**	
L702	**G0A201J00001**	**Coil**	
CRYSTALs			
XL401	**H0D720400003**	**Crystal**	

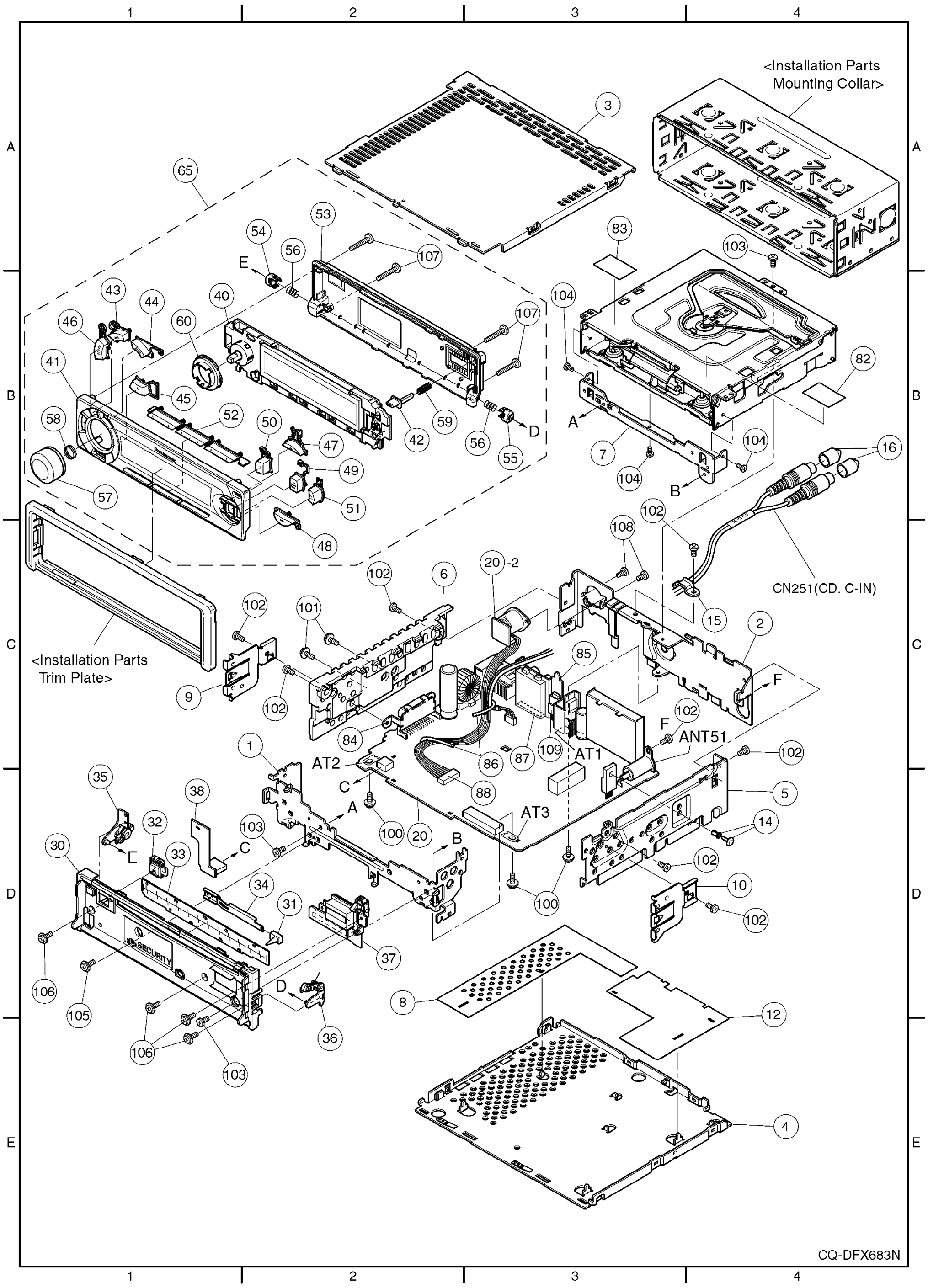
Ref. No.	Part No.	Part Name & Description	Remarks
XL501	YESXL019	Crystal	
XL601	YESXL017	Crystal	
XL602	H0A327200080	Crystal	
THERMISTOR			
PT701	YERT7AR4R7MT	Thermistor	
SWITCH			
SW601	K0L1BB000003	Switch	
SERGE PROTECTOR			
Z50	J0LE00000002	Serge Protector	
VARISTOR			
Z701	ERZS07DK470T	Varistor	
[7201-05-01] Display Block			
IC's and TRANSISTORs			
IC901	YEAMLC75854T	IC	
IC905	B3MBZ0000006	IC	
Q901	B1GDCFJJ0008	Transistor	
Q902	B1GBCFNN0009	Transistor	
DIODEs			
D901	B3AAB0000143	LED	
D902	B3AAB0000143	LED	
D903	B3AAB0000143	LED	
D904	B3AAB0000143	LED	
D905	B3AAB0000143	LED	
D906	B3AAB0000143	LED	
D907	B3AAB0000143	LED	
D908	B3AAB0000143	LED	
D909	B3AAB0000143	LED	
D910	B3AAB0000143	LED	
D911	B3AAB0000143	LED	
D912	B3AAB0000143	LED	
D913	B3AAB0000143	LED	
D914	B3AAB0000143	LED	
D915	B3AAB0000143	LED	
D926	MAZ805600L	Zener Diode	
D927	MAZ805600L	Zener Diode	
D928	MAZ805600L	Zener Diode	
D929	MAZ805600L	Zener Diode	
D940	B3AFB0000039	LED	
D941	B3AFB0000039	LED	
D942	MA8047MTX	Zener Diode	
D943	MA8047MTX	Zener Diode	

Ref. No.	Part No.	Part Name & Description	Remarks
CAPACITORs			
C910	YESCC233	Ceramic, 1000pF 50WV	
C911	YESCC229	Ceramic, 1 μ F 16WV	
C912	YESCC229	Ceramic, 1 μ F 16WV	
C914	YESCC228	Ceramic, 0.1 μ F 16WV	
C915	YESCC228	Ceramic, 0.1 μ F 16WV	
C916	YESCC228	Ceramic, 0.1 μ F 16WV	
C923	F1J1H681A025	Ceramic, 680pF 50WV	
RESISTORs			
R906	ERJ6GEYJ101	Chip, 100 Ω 1/10W	
R907	ERJ6GEYJ102	Chip, 1k Ω 1/10W	
R908	ERJ6GEYJ102	Chip, 1k Ω 1/10W	
R909	ERJ6GEYJ102	Chip, 1k Ω 1/10W	
R910	ERJ6GEYJ102	Chip, 1k Ω 1/10W	
R911	ERJ6GEYJ102	Chip, 1k Ω 1/10W	
R938	ERJ6GEYJ4R7	Chip, 4.7 Ω 1/10W	
R939	ERJ6GEYJ4R7	Chip, 4.7 Ω 1/10W	
R940	ERJ8GEYJ331V	Chip, 330 Ω 1/8W	
R941	ERJ6GEYJ103	Chip, 10k Ω 1/10W	
R942	ERJ6GEYJ473	Chip, 47k Ω 1/10W	
R944	ERJ8GEYJ331V	Chip, 330 Ω 1/8W	
R956	ERJ6GEYJ821	Chip, 820 Ω 1/10W	
R958	ERJ6GEY0R00V	Chip, 0 Ω 1/10W	
R959	ERJ6GEYJ511V	Chip, 510 Ω 1/10W	
R960	ERJ6GEYJ511V	Chip, 510 Ω 1/10W	
R961	ERJ6GEYJ511V	Chip, 510 Ω 1/10W	
R962	ERJ6GEYJ152	Chip, 1.5k Ω 1/10W	
R963	ERJ6GEYJ511V	Chip, 510 Ω 1/10W	
CONNECTOR			
CN901	YEAE012760	Connector 14P	
SWITCHEs			
SW901	K9AA024A0007	Switch	
SW903	K0H1BA000445	Switch	
SW904	K0H1BA000445	Switch	
SW905	K0H1BA000445	Switch	
SW907	K0H1BA000445	Switch	
SW908	K0H1BA000445	Switch	
SW909	K0H1BA000445	Switch	
SW910	K0H1BA000445	Switch	
SW911	K0H1BA000445	Switch	
SW912	K0H1BA000445	Switch	
SW913	K0H1BA000445	Switch	
SW914	K0H1BA000445	Switch	
SW915	K0H1BA000445	Switch	
SW916	K0H1BA000445	Switch	
SW917	K0H1BA000445	Switch	

Ref. No.	Part No.	Part Name & Description	Remarks
SW918	K0H1BA000445	Switch	
LCD			
LCD901	YESXDCU007	LCD	
[7201-02-14] Connector Block			
CN640	K1KA15A00096	Connector 15P	
CP641	YEAE012761	Connector 14P	
[7201-02-13] Eject Block			
D642	B3ABB0000154	LED	
D643	B3ABB0000154	LED	
SW610	K0H1BA000445	Switch	
CJ642	K1KA04A00296	Connector 4P	
Accessories			
PRINTING			
	YEFM283971	Operating Instructions	
	YEFM292934	Installation Instructions (A)	
	YEFM292935	Installation Instructions (B)	
INSTALLATION PARTs			
	YEFA131733	Removal Face Plate Case	
	YEAJ02874	Power Connector	
	YEFX9992663	Remote Control Unit	
	YEP0FX3316	Screws Kit (Bolt, ISO antenna adapter,Lock cancel plate)	
	YESFX018006	Mounting Collar	
	YESFC05016	Trim Plate	
	CR2025/1F	Lithium Battery	⚠
MECHANICAL PARTS			
MISCELLANEOUS			
ANT51	YM104C700ZA	ANT Jack	
AT1	K4ZZ01000048	Earth Terminal	
AT2	K4ZZ01000048	Earth Terminal	
AT3	K4ZZ01000048	Earth Terminal	
1	YESFA01066	Front Chassis	
2	YESFA08018	Rear Plate 683N	
3	YESFA03053	Top Cover A	
4	YESFA05034	Bottom Cover Assy	
5	YESFA09004	Side Plate	
6	YESFF01079	Heat Sink	
7	YESFG02027	Front Bracket	
8	YESFV01061	Insulated Sheet L	
9	YESFX005133	Plate Spring L	
10	YESFX005134	Plate Spring R	
12	YESFV01062	Insulated Sheet R	

Ref. No.	Part No.	Part Name & Description	Remarks
14	YESFX014007	Rivet	
15	YESFX007024	Cord Clamper	
16	YESFR04010	RCA Cap	
20	YESAP268	Main PCB Assy	RTL
30	YESFC02079	Escutcheon	
31	YEFX9992957	Cap Lever Detect	
32	YESFE13116	Eject Button	
33	YESFS04016	Dust Felt	
34	YESFX999053	Lever Spring Detect	
35	YESFX999050	Bracket Arm L Assy	
36	YESFX999051	Bracket Arm R Assy	
37	YESAP252	CN PCB/BKT Hook Assy	RTL
38	YESAP253	EJ PCB Assy	RTL
40	YESAP251	Display PCB Assy	RTL
41	YESFC02090	Escutcheon Assy	
42	YESFE13115	Button (OPEN)	
43	YESFE13108	Button (MUTE)	
44	YESFE13109	Button (S HDB)	
45	YESFE13124	Button (TA)	
46	YESFE13111	Button (SOURCE)	
47	YESFE13125	Button (AF)	
48	YESFE13113	Button (DISP)	
49	YESFE13114	Button (BAND APM)	
50	YESFE13117	Button (TUNE DOWN)	
51	YESFE13118	Button (TUNE UP)	
52	YESFE13119	Preset Button	
53	YESFA07008	Rear Cover	
54	YESFX999054	Rear Cover Metal L	
55	YESFX999055	Rear Cover Metal R	
56	YESFX005135	Metal Spring	
57	YESFE02017	Vol Knob	
58	YESFX005131	Knob Spring	
59	YESFX005136	Open Button Spring	
60	YESFL02041	Indicator (Vol)	
65	YESSDF0113	Removable Face Plate Unit	RTL
82	YESFM01083	Laser Seal (3 Language)	
83	YESFM01084	Laser Seal (4 Language)	
84	YESFG02029	PWR IC Bracket	
85	YESFG02030	RCA Bracket	
86	YESFX007023	Style Pin	
87	YESFL02041	PCB Sheet	
88	YESAJ07007	Connector, 7P w/wire	
100	YESJS01165	Cup Screw S Tite M3.0*6.0	
101	YESJS01160	Cap Screw 3*6	
102	YESJT03067	Tapping ScrewiBindjS Tite M3*6	
103	YESJS01163	S Tite Bind 2.6*6 Black CR	
104	YESJS01162	C Tite 2.0*3.0	
105	YESJS01161	Cap Screw 2*5 Black CR	
106	YESJS01159	Cap Screw 2*4	
107	YESJS01164	P Tite 2*8 Black CR	
108	YESJS01166	Screw Bind 3.0*6.0	
109	YESJT03069	Tapping Screw Bind 2.6*8	

12. EXPLODED VIEW [CQ-DFX683N]


1
2
3
4
A
B
C
D
E
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3
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53
54
56
E
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83
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104
107
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82
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58
52
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42
59
56
55
D
A
7
104
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57
51
104
B
102
48
108
20-2
102
6
CN251(CD. C-IN)
102
101
15
2
<Installation Parts Trim Plate>
85
F
9
102
102
F
ANT51
84
86
87
109
AT1
102
1
AT2
88
35
38
C
A
AT3
5
32
103
100
20
B
14
30
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C
102
10
34
31
100
102
106
37
105
D
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103
4
CQ-DFX683N

13. REPLACEMENT PARTS LIST[CQ-DFX223N/ DFX213N/DFX203N]

Notes :

1. Be sure to make your orders of replacement parts according to

this list.

2. **Important safety notice: Components, identified by ⚠ mark have special characteristics important for safety. When replacing any of these components, use only manufacturer's specified parts.**
3. **Location keys in the remarks column indicates the general location of the parts shown in the exploded drawing, as in a road map.**
4. **The marking (RTL) indicates that Retention Time is limited for this item. After the discontinuation of assembly in production, the item will continue to be available for a specific period of time. The retention period of availability is dependent on the type of assembly, and in accordance with the laws governing part and product retention. After the end of this period, the assembly will no longer be available.**
   - **Order intake period is basically six months after the first shipment.**
5. **"A" or "B" marks in remarks column are indicated as follows :**
   - **A : CQ-DFX223N**
   - **B : CQ-DFX213N**
   - **C : CQ-DFX203N**

Ref. No.	Part No.	Part Name & Description	Remarks
[7201-02-11A] Main Block			
IC's and Transistors			
IC201	C1BB00000543	IC	
IC271	C1EA00000021	IC	
IC280	C0ABBB000073	IC	
IC401	C1BB00000644	IC	
IC501	YESAM179	IC	
IC601	YESAM180	IC	
IC650	YEAMTC4584FN	IC	
IC701	C0EAB0000002	IC	
IC702	C0EAH0000025	IC	
IC719	YESAM158	IC	
IC761	C0CAAHF00001	IC	
IC781	C0CAAHF00001	IC	
IC783	YESAM159	IC	
PA51	YESAP263	Electronic Tuner	
Q52	B1GDCFNN0002	Transistor	
Q54	B1GBCFNN0004	Transistor	
Q55	B1GBNCEJ0001	Transistor	
Q66	YESAN063	Transistor	
Q262	B1GBHBEA0004	Transistor	
Q266	B1GBHBEA0004	Transistor	
Q362	B1GBHBEA0004	Transistor	
Q366	B1GBHBEA0004	Transistor	
Q411	B1CBGF000001	FET	
Q642	B1GBCFNN0004	Transistor	
Q644	B1GDCFJN0004	Transistor	
Q645	B1GDCFJN0004	Transistor	
Q646	B1GBCFNN0004	Transistor	
Q660	YEANFP1F3PT1	Transistor	
Q661	B1GDCFJA0001	Transistor	
Q670	B1GDCFJJ0002	Transistor	
Q701	YESAN058	Transistor	
Q703	B1BCCF000017	Transistor	
Q704	B1GDJCEJ0001	Transistor	
Q705	YESAN058	Transistor	
Q708	YESAN059	Transistor	
Q709	B1BAAJ000005	Transistor	
Q720	B1GBNCEJ0001	Transistor	
Q721	B1GBCFJN0004	Transistor	
Q760	B1GBCFJN0004	Transistor	
Q761	B1BCCF000017	Transistor	
Q781	B1BCCF000017	Transistor	
Q782	B1GBCFJN0004	Transistor	
DIODEs			
D270	YESAD098	Diode	
D271	YESAD098	Diode	
D272	YESAD098	Diode	
D273	YESAD098	Diode	
D274	YESAD098	Diode	
D275	YESAD098	Diode	
D276	YESAD098	Diode	

Ref. No.	Part No.	Part Name & Description	Remarks
D277	YESAD098	Diode	
D504	B0BC5R000004	Zener Diode	
D601	LN25RP	LED	
D603	MA3X152A0L	Diode	
D650	MA3X152A0L	Diode	
D676	MA3X152D0L	Diode	
D680	MA3X152A0L	Diode	
D681	B0BC5R000004	Zener Diode	
D682	YESAD101	Diode	
D702	B0EANM000001	Diode	
D703	YESAD096	Zener Diode	
D705	MA3X70400R	Diode	
D706	B0EAMM000001	Diode	
D707	B0JCPE000004	Diode	
D708	YESAD097	Zener Diode	
D709	MA3X72100L	Diode	
D710	B0BC5R000004	Zener Diode	
D711	YESAD096	Zener Diode	
D713	B0EANM000001	Diode	
D714	YESAD095	Zener Diode	
D719	YESAD102	Diode	
CAPACITORs			
C51	YESCC225	Ceramic, 47pF 50WV	
C53	YESCC234	Ceramic, 0.01 μ F 50WV	
C54	ECA1AM331I	Electrolytic, 330 μ F 10WV	
C55	YESCC234	Ceramic, 0.01 μ F 50WV	
C56	YESCC219	Ceramic, 10pF 50WV	
C61	YESCC236	Ceramic, 0.018 μ 50WV	
C62	YESCC236	Ceramic, 0.018 μ 50WV	
C65	YESCC233	Ceramic, 1000pF 50WV	
C66	YESCC226	Ceramic, 470pF 50WV	
C201	F1J1H681A025	Ceramic, 680pF 50WV	
C202	F1J1H681A025	Ceramic, 680pF 50WV	
C203	ECEA1HKA3R3I	Electrolytic, 3.3 μ F 50WV	
C204	YESCC191	Ceramic, 2.2 μ F	
C206	YESCC191	Ceramic, 2.2 μ F	
C207	YESCC228	Ceramic, 0.1 μ F 16WV	
C208	YESCC230	Ceramic, 0.33 μ F 16WV	
C209	YESCC191	Ceramic, 2.2 μ F	
C210	YESCC228	Ceramic, 0.1 μ F 16WV	
C212	YESCC228	Ceramic, 0.1 μ F 16WV	
C220	ECEA1HKA2R2I	Electrolytic, 2.2 μ F 50WV	
C261	ECEA1HKA4R7I	Electrolytic, 4.7 μ F 50WV	
C263	ECEA1HKA010I	Electrolytic, 1 μ F 50WV	
C264	ECEA1HKA010I	Electrolytic, 1 μ F 50WV	
C265	ECEA1HKA4R7I	Electrolytic, 4.7 μ F 50WV	
C267	ECEA1HKA010I	Electrolytic, 1 μ F 50WV	
C268	ECEA1HKA010I	Electrolytic, 1 μ F 50WV	

Ref. No.	Part No.	Part Name & Description	Remarks
C271	YESCC235	Ceramic, 4700pF 50WV	
C272	YESCC235	Ceramic, 4700pF 50WV	
C275	ECEA1HKA2R2I	Electrolytic, 2.2 μ F 50WV	
C276	ECEA1AKS101I	Electrolytic, 100 μ F 10WV	
C277	ECA1HHG010I	Electrolytic, 1 μ F 50WV	
C278	YESCC228	Ceramic, 0.1 μ F 16WV	
C279	ECA1CDT472Y	Electrolytic, 4700 μ F 16WV	
C280	YESCC228	Ceramic, 0.1 μ F 16WV	
C282	ECEA1AKA220I	Electrolytic, 22 μ F 10WV	
C284	YESCC231	Ceramic, 0.022 μ F 25WV	
C301	F1J1H681A025	Ceramic, 680pF 50WV	
C302	F1J1H681A025	Ceramic, 680pF 50WV	
C303	ECEA1HKA3R3I	Electrolytic, 3.3 μ F 50WV	
C304	YESCC191	Ceramic, 2.2 μ F	
C306	YESCC191	Ceramic, 2.2 μ F	
C308	YESCC230	Ceramic, 0.33 μ F 16WV	
C309	ECEA1CKA100I	Electrolytic, 10 μ F 16WV	
C310	ECEA1AKS221I	Electrolytic, 220 μ F 10WV	
C320	ECEA1HKA2R2I	Electrolytic, 2.2 μ F 50WV	
C325	YESCC222	Ceramic, 220pF 50WV	
C361	ECEA1HKA4R7I	Electrolytic, 4.7 μ F 50WV	
C363	ECEA1HKA010I	Electrolytic, 1 μ F 50WV	
C364	ECEA1HKA010I	Electrolytic, 1 μ F 50WV	
C365	ECEA1HKA4R7I	Electrolytic, 4.7 μ F 50WV	
C367	ECEA1HKA010I	Electrolytic, 1 μ F 50WV	
C368	ECEA1HKA010I	Electrolytic, 1 μ F 50WV	
C371	YESCC235	Ceramic, 4700pF 50WV	
C372	YESCC235	Ceramic, 4700pF 50WV	
C375	ECEA1CKA100I	Electrolytic, 10 μ F 16WV	
C378	YESCC228	Ceramic, 0.1 μ F 16WV	
C381	YESCC233	Ceramic, 1000pF 50WV	
C401	C2012CH1H150J	Ceramic, 15pF 50WV	
C402	C2012CH1H150J	Ceramic, 15pF 50WV	
C403	ECEA0JKA101I	Electrolytic, 100 μ F 6.3WV	
C404	YESCC234	Ceramic, 0.01 μ F 50WV	
C405	YESCC220	Ceramic, 100pF 50WV	
C411	YESCC234	Ceramic, 0.01 μ F 50WV	
C412	YESCC231	Ceramic, 0.022 μ F 25WV	
C413	ECQV1H224JL2	Film, 0.22 μ F 50WV	
C417	ECEA1AKS221I	Electrolytic, 220 μ F 10WV	
C418	ECEA1AKS221I	Electrolytic, 220 μ F 10WV	
C419	ECEA1AKS221I	Electrolytic, 220 μ F 10WV	
C420	YESCC193	Ceramic, 47pF 50WV	
C421	YESCC193	Ceramic, 47pF 50WV	
C501	YESCC223	Ceramic, 27pF 50WV	
C502	YESCC219	Ceramic, 10pF 50WV	
C504	ECEA1CKA470I	Electrolytic, 47 μ F 16WV	

Ref. No.	Part No.	Part Name & Description	Remarks
C505	YESCC228	Ceramic, 0.1 μF 16WV	
C506	YESCC234	Ceramic, 0.01 μF 50WV	
C507	YESCC224	Ceramic, 270pF 50WV	
C508	ECEA1CKA100I	Electrolytic, 10 μF 16WV	
C601	EECS0HD473H	Electrolytic, 0.047 μF 5.5WV	
C602	ECEA0JKA331I	Electrolytic, 330 μF 6.3WV	
C605	YESCC234	Ceramic, 0.01 μF 50WV	
C624	YESCC228	Ceramic, 0.1 μF 16WV	
C628	YESCC228	Ceramic, 0.1 μF 16WV	
C631	YESCC229	Ceramic, 1 μF 16WV	
C634	YESCC221	Ceramic, 22pF 50WV	
C635	YESCC221	Ceramic, 22pF 50WV	
C636	YESCC234	Ceramic, 0.01 μF 50WV	
C651	YESCC234	Ceramic, 0.01 μF 50WV	
C660	ECEA1HKA2R2I	Electrolytic, 2.2 μF 50WV	
C674	ECEA1AKS221I	Electrolytic, 220 μF 10WV	
C675	YESCC234	Ceramic, 0.01 μF 50WV	
C680	ECSH1CY225R	Tantalum, 2.2 μF 16WV	
C683	ECEA1HKA4R7I	Electrolytic, 4.7 μF 50WV	
C687	ECEA1CKA470I	Electrolytic, 47 μF 16WV	
C688	YESCC228	Ceramic, 0.1 μF 16WV	
C701	YESCC192	Electrolytic, 220 μF 16WV	
C702	ECEA1HKA4R7I	Electrolytic, 4.7 μF 50WV	
C704	ECEA0JKA470I	Electrolytic, 47 μF 6.3WV	
C705	ECEA1HKA010I	Electrolytic, 1 μF 50WV	
C708	ECEA1AKS221I	Electrolytic, 220 μF 10WV	
C710	ECEA1AKS101I	Electrolytic, 100 μF 10WV	
C711	ECEA0JKA470I	Electrolytic, 47 μF 6.3WV	
C713	YESCC228	Ceramic, 0.1 μF 16WV	
C715	ECA1CDT102UB	Electrolytic, 1000 μF 16WV	
C717	YESCC228	Ceramic, 0.1 μF 16WV	
C718	YESCC228	Ceramic, 0.1 μF 16WV	
C719	EEAFC1A820H	Electrolytic, 82 μF 10WV	
C720	ECEA1CKA101I	Electrolytic, 100 μF 16WV	
C721	ECEA0JKA470I	Electrolytic, 47 μF 6.3WV	
C752	YESCC228	Ceramic, 0.1 μF 16WV	
C768	ECA1EHG470I	Electrolytic, 47 μF 25WV	
C769	YESCC232	Ceramic, 0.22 μ 25WV	
C770	YESCC232	Ceramic, 0.22 μ 25WV	
C771	EEAFC1A820H	Electrolytic, 82 μF 10WV	
C781	YESCC232	Ceramic, 0.22 μ 25WV	
C782	YESCC232	Ceramic, 0.22 μ 25WV	
C783	ECEA1AKS101I	Electrolytic, 100 μF 10WV	
C786	YESCC228	Ceramic, 0.1 μF 16WV	
C787	ECEA0JKA101I	Electrolytic, 100 μF 6.3WV	

Ref. No.	Part No.	Part Name & Description	Remarks
C788	YESCC228	Ceramic, 0.1 μ F 16WV	
C789	ECEA1AKS101I	Electrolytic, 100 μ F 10WV	
C791	YESCC228	Ceramic, 0.1 μ F 16WV	
C792	YESCC218	Ceramic, 0.033 μ F 25WV	
C793	YESCC232	Ceramic, 0.22 μ 25WV	
C794	YESCC228	Ceramic, 0.1 μ F 16WV	
C795	ECEA1AKS221I	Electrolytic, 220 μ F 10WV	
C796	ECEA1AKS221I	Electrolytic, 220 μ F 10WV	
C797	YESCC234	Ceramic, 0.01 μ F 50WV	
C798	YESCC228	Ceramic, 0.1 μ F 16WV	
RESISTORs			
FB201	ERJ6GEY0R00V	Chip, 0 Ω 1/10W	
FB202	ERJ6GEY0R00V	Chip, 0 Ω 1/10W	
FB301	ERJ6GEY0R00V	Chip, 0 Ω 1/10W	
FB302	ERJ6GEY0R00V	Chip, 0 Ω 1/10W	
J001	ERJ8GEY0R00V	Chip, 0 Ω 1/8W	
J002	ERJ8GEY0R00V	Chip, 0 Ω 1/8W	
J201	ERJ8GEY0R00V	Chip, 0 Ω 1/8W	
J204	ERJ8GEY0R00V	Chip, 0 Ω 1/8W	
J205	ERJ8GEY0R00V	Chip, 0 Ω 1/8W	
J207	ERJ8GEY0R00V	Chip, 0 Ω 1/8W	
J208	ERJ8GEY0R00V	Chip, 0 Ω 1/8W	
J302	ERJ6GEY0R00V	Chip, 0 Ω 1/10W	
J303	ERJ6GEY0R00V	Chip, 0 Ω 1/10W	
J50	ERJ6GEY0R00V	Chip, 0 Ω 1/10W	
JP003	ERJ6GEY0R00V	Chip, 0 Ω 1/10W	
L61	ERJ6GEY0R00V	Chip, 0 Ω 1/10W	
L62	ERJ6GEY0R00V	Chip, 0 Ω 1/10W	
L291	ERJ6GEY0R00V	Chip, 0 Ω 1/10W	
L298	ERJ6GEY0R00V	Chip, 0 Ω 1/10W	
L398	ERJ6GEY0R00V	Chip, 0 Ω 1/10W	
R50	ERJ6GEY0R00V	Chip, 0 Ω 1/10W	
R51	ERJ6GEYJ5R6V	Chip, 5.6 Ω 1/10W	
R52	ERJ6GEYJ101	Chip, 100ohm; 1/10W	
R53	ERJ6GEYJ221V	Chip, 220 Ω 1/10W	
R59	ERJ6GEYJ104	Chip, 100k Ω 1/10W	
R65	ERJ6GEYJ393	Chip, 39k Ω 1/10W	
R66	ERJ6GEYJ334	Chip, 330k Ω 1/10W	
R67	ERJ6GEYJ222	Chip, 2.2k Ω 1/10W	
R68	ERJ6GEYJ102	Chip, 1k Ω 1/10W	
R201	ERJ6GEYJ102	Chip, 1k Ω 1/10W	
R202	ERJ6GEYJ102	Chip, 1k Ω 1/10W	
R203	ERJ6GEYJ393	Chip, 39k Ω 1/10W	
R204	ERJ6GEYJ562	Chip, 5.6k Ω 1/10W	
R205	ERJ6GEYJ103	Chip, 10k Ω 1/10W	
R207	ERJ6GEYJ123	Chip, 12k Ω 1/10W	
R208	ERJ6GEYJ363V	Chip, 36k Ω 1/10W	
R225	ERJ6GEYJ102	Chip, 1k Ω 1/10W	
R226	ERJ6GEYJ102	Chip, 1k Ω 1/10W	

[illegible]	[illegible]	Chip, 1K 1/10W	

Ref. No.	Part No.	Part Name & Description	Remarks
R227	ERJ6GEYJ123	Chip, 12k Ω 1/10W	
R251	ERJ6GEY0R00V	Chip, 0 Ω 1/10W	
R257	ERJ6GEY0R00V	Chip, 0 Ω 1/10W	
R261	ERJ6GEYJ181	Chip, 180 Ω 1/10W	
R262	ERJ6GEYJ103	Chip, 10k Ω 1/10W	
R263	ERJ6GEYJ561	Chip, 560 Ω 1/10W	
R265	ERJ6GEYJ181	Chip, 180 Ω 1/10W	
R266	ERJ6GEYJ103	Chip, 10k Ω 1/10W	
R267	ERJ6GEYJ561	Chip, 560 Ω 1/10W	
R268	ERJ6GEY0R00V	Chip, 0 Ω 1/10W	
R269	ERJ6GEY0R00V	Chip, 0 Ω 1/10W	
R275	ERJ6GEYJ223	Chip, 22k Ω 1/10W	
R280	ERJ6GEYJ104	Chip, 100k Ω 1/10W	
R283	ERJ6GEYJ123	Chip, 12k Ω 1/10W	
R301	ERJ6GEYJ102	Chip, 1k Ω 1/10W	
R302	ERJ6GEYJ102	Chip, 1k Ω 1/10W	
R303	ERJ6GEYJ393	Chip, 39k Ω 1/10W	
R304	ERJ6GEYJ562	Chip, 5.6k Ω 1/10W	
R305	ERJ6GEYJ103	Chip, 10k Ω 1/10W	
R307	ERJ6GEYJ123	Chip, 12k Ω 1/10W	
R308	ERJ6GEYJ363V	Chip, 36k Ω 1/10W	
R325	ERJ6GEYJ103	Chip, 10k Ω 1/10W	
R326	ERJ6GEYJ103	Chip, 10k Ω 1/10W	
R351	ERJ6GEY0R00V	Chip, 0 Ω 1/10W	
R357	ERJ6GEY0R00V	Chip, 0 Ω 1/10W	
R361	ERJ6GEYJ181	Chip, 180 Ω 1/10W	
R362	ERJ6GEYJ103	Chip, 10k Ω 1/10W	
R363	ERJ6GEYJ561	Chip, 560 Ω 1/10W	
R365	ERJ6GEYJ181	Chip, 180 Ω 1/10W	
R366	ERJ6GEYJ103	Chip, 10k Ω 1/10W	
R367	ERJ6GEYJ561	Chip, 560 Ω 1/10W	
R368	ERJ6GEY0R00V	Chip, 0 Ω 1/10W	
R369	ERJ6GEY0R00V	Chip, 0 Ω 1/10W	
R375	ERJ6GEYJ123	Chip, 12k Ω 1/10W	
R381	ERJ6GEYJ473	Chip, 47k Ω 1/10W	
R382	ERJ6GEYJ472	Chip, 4.7k Ω 1/10W	
R383	ERJ6GEYJ473	Chip, 47k Ω 1/10W	
R384	ERJ6GEYJ103	Chip, 10k Ω 1/10W	
R401	ERJ6GEYJ152	Chip, 1.5k Ω 1/10W	
R402	ERJ6GEYJ222	Chip, 2.2k Ω 1/10W	
R403	ERJ6GEYJ473	Chip, 47k Ω 1/10W	
R408	ERJ6GEYJ473	Chip, 47k Ω 1/10W	
R413	ERJ6GEYJ182	Chip, 1.8k Ω 1/10W	
R414	ERJ6GEYJ561	Chip, 560 Ω 1/10W	
R417	ERJ6GEYJ100	Chip, 10ohm; 1/10W	
R418	ERJ6GEYJ102	Chip, 1k Ω 1/10W	
R419	ERJ6GEYJ102	Chip, 1k Ω 1/10W	
R420	ERJ6GEYJ102	Chip, 1k Ω 1/10W	
R421	ERJ6GEYJ102	Chip, 1k Ω 1/10W	
R422	ERJ6GEYJ102	Chip, 1k Ω 1/10W	
R423	ERJ6GEYJ102	Chip, 1k Ω 1/10W	

Ref. No.	Part No.	Part Name & Description	Remarks
R424	ERJ6GEYJ221V	Chip, 220 Ω 1/10W	
R425	ERJ6GEYJ221V	Chip, 220 Ω 1/10W	
R501	ERJ6GEYJ225V	Chip, 2.2M 1/10W	
R504	ERJ6GEYJ331	Chip, 330 Ω 1/10W	
R506	ERJ6GEYJ103	Chip, 10k Ω 1/10W	
R507	ERJ6GEYJ103	Chip, 10k Ω 1/10W	
R510	ERJ6GEY0R00V	Chip, 0 Ω 1/10W	
R600	ERJ6GEYJ104	Chip, 100k Ω 1/10W	
R601	ERJ6GEYJ104	Chip, 100k Ω 1/10W	
R604	ERJ6GEYJ473	Chip, 47k Ω 1/10W	
R605	ERJ6GEYJ332	Chip, 3.3k Ω 1/10W	
R607	ERJ6GEYJ332	Chip, 3.3k Ω 1/10W	
R608	ERJ6GEYJ332	Chip, 3.3k Ω 1/10W	
R609	ERJ6GEYJ154	Chip, 150k Ω 1/10W	
R610	ERJ6GEYJ104	Chip, 100k Ω 1/10W	
R611	ERJ6GEYJ332	Chip, 3.3k Ω 1/10W	
R612	ERJ6GEYJ102	Chip, 1k Ω 1/10W	
R614	ERJ6GEYJ102	Chip, 1k Ω 1/10W	
R618	ERJ6GEYJ104	Chip, 100k Ω 1/10W	
R620	ERJ6GEYJ102	Chip, 1k Ω 1/10W	
R621	ERJ6GEYJ102	Chip, 1k Ω 1/10W	
R622	ERJ6GEYJ102	Chip, 1k Ω 1/10W	
R623	ERJ6GEYJ102	Chip, 1k Ω 1/10W	
R624	ERJ6GEYJ472	Chip, 4.7k Ω 1/10W	
R625	ERJ6GEYJ103	Chip, 10k Ω 1/10W	
R626	ERJ6GEYJ822	Chip, 8.2k Ω 1/10W	
R628	ERJ6GEYJ184	Chip, 180k Ω 1/10W	
R631	ERJ6GEY0R00V	Chip, 0 Ω 1/10W	
R632	ERJ6GEY0R00V	Chip, 0 Ω 1/10W	
R633	ERJ6GEYJ472	Chip, 4.7k Ω 1/10W	
R634	ERJ6GEYJ564	Chip, 560k Ω 1/10W	
R635	ERJ6GEYJ822	Chip, 8.2k Ω 1/10W	
R636	ERJ6GEYJ333	Chip, 33k Ω 1/10W	
R638	ERJ6GEYJ102	Chip, 1k Ω 1/10W	
R640	ERJ6GEYJ473	Chip, 47k Ω 1/10W	
R641	ERJ6GEYJ473	Chip, 47k Ω 1/10W	
R642	ERJ6GEYJ681	Chip, 680 Ω 1/10W	
R643	ERJ6GEYJ102	Chip, 1k Ω 1/10W	
R644	ERJ6GEYJ391	Chip, 390 Ω 1/10W	
R645	ERJ6GEYJ391	Chip, 390 Ω 1/10W	
R650	ERJ6GEYJ104	Chip, 100k Ω 1/10W	
R651	ERJ6GEYJ104	Chip, 100k Ω 1/10W	
R652	ERJ6GEYJ104	Chip, 100k Ω 1/10W	
R653	ERJ6GEYJ104	Chip, 100k Ω 1/10W	
R656	ERJ6GEYJ104	Chip, 100k Ω 1/10W	
R657	ERJ6GEYJ104	Chip, 100k Ω 1/10W	
R658	ERJ8GEYJ152V	Chip, 1.5k Ω 1/8W	
R659	ERJ6GEYJ102	Chip, 1k Ω 1/10W	
R660	ERJ6GEYJ561	Chip, 560 Ω 1/10W	
R661	ERJ6GEYJ562	Chip, 5.6k Ω 1/10W	
R662	ERJ6GEYJ473	Chip, 47k Ω 1/10W	

Ref. No.	Part No.	Part Name & Description	Remarks
R664	**ERJ6GEYJ471**	**Chip, 470 Ω 1/10W**	
R669	**ERJ6GEYJ5R6V**	**Chip, 5.6 Ω 1/10W**	
R670	**ERJ6GEY0R00V**	**Chip, 0 Ω 1/10W**	
R672	**ERJ6GEYJ102**	**Chip, 1k Ω 1/10W**	
R673	**ERJ6GEYJ184**	**Chip, 180k Ω 1/10W**	
R674	**ERJ6GEYJ102**	**Chip, 1k Ω 1/10W**	
R676	**ERJ6GEYJ102**	**Chip, 1k Ω 1/10W**	
R678	**ERJ6GEYJ102**	**Chip, 1k Ω 1/10W**	
R679	**ERJ6GEYJ102**	**Chip, 1k Ω 1/10W**	
R680	**ERJ6GEYJ104**	**Chip, 100k Ω 1/10W**	
R681	**ERJ6GEYJ102**	**Chip, 1k Ω 1/10W**	
R682	**ERJ6GEYJ273**	**Chip, 27k Ω 1/10W**	
R683	**ERJ6GEYJ104**	**Chip, 100k Ω 1/10W**	
R684	**ERJ6GEYJ104**	**Chip, 100k Ω 1/10W**	
R685	**ERJ6GEYJ102**	**Chip, 1k Ω 1/10W**	
R687	**ERJ6GEYJ102**	**Chip, 1k Ω 1/10W**	
R689	**ERJ6GEY0R00V**	**Chip, 0 Ω 1/10W**	
R690	**ERJ6GEYJ102**	**Chip, 1k Ω 1/10W**	
R691	**ERJ6GEYJ102**	**Chip, 1k Ω 1/10W**	
R692	**ERJ6GEYJ331**	**Chip, 330 Ω 1/10W**	
R693	**ERJ6GEYJ102**	**Chip, 1k Ω 1/10W**	
R694	**ERJ6GEYJ102**	**Chip, 1k Ω 1/10W**	
R695	**ERJ6GEYJ102**	**Chip, 1k Ω 1/10W**	
R696	**ERJ6GEYJ102**	**Chip, 1k Ω 1/10W**	
R697	**ERJ6GEYJ473**	**Chip, 47k Ω 1/10W**	
R698	**ERJ6GEYJ473**	**Chip, 47k Ω 1/10W**	
R699	**ERJ6GEYJ473**	**Chip, 47k Ω 1/10W**	
R700	**ERJ6GEYJ104**	**Chip, 100k Ω 1/10W**	
R701	**ERJ8GEYJ100V**	**Chip, 10 Ω 1/8W**	
R702	**ERJ6GEYJ102**	**Chip, 1k Ω 1/10W**	
R703	**ERJ6GEYJ103**	**Chip, 10k Ω 1/10W**	
R704	**ERJ6GEYJ684**	**Chip, 680k Ω 1/10W**	
R705	**ERJ6GEYJ333**	**Chip, 33k Ω 1/10W**	
R706	**ERJ6GEYJ204V**	**Chip, 200k Ω 1/10W**	
R707	**ERJ6GEYJ123**	**Chip, 12k Ω 1/10W**	
R708	**ERJ6GEYJ113V**	**Chip, 11k Ω 1/10W**	
R709	**ERJ6GEYJ473**	**Chip, 47k Ω 1/10W**	
R710	**ERDS1FJ820**	**Chip, 82 Ω 1/2W**	
R711	**ERDS1FJ820**	**Chip, 82 Ω 1/2W**	
R712	**ERJ8GEYJ1R0V**	**Chip, 1 Ω 1/8W**	
R713	**ERJ8GEYJ1R0V**	**Chip, 1 Ω 1/8W**	
R714	**ERDS1FJ102**	**Chip, 1k Ω 1/2W**	
R718	**ERJ6GEY0R00V**	**Chip, 0 Ω 1/10W**	
R719	**ERDS2TJ681**	**Chip, 680 Ω 1/4W**	
R720	**ERJ6GEYJ362V**	**Chip, 3.6k Ω 1/10W**	
R722	**ERJ6GEY0R00V**	**Chip, 0 Ω 1/10W**	
R723	**ERJ8GEY0R00V**	**Chip, 0 Ω 1/8W**	
R731	**ERJ6GEYJ102**	**Chip, 1k Ω 1/10W**	
R733	**ERJ6GEYJ223**	**Chip, 22k Ω 1/10W**	
R759	**ERJ6GEYJ473**	**Chip, 47k Ω 1/10W**	
R771	**ERJ6GEY0R00V**	**Chip, 0 Ω 1/10W**	

Ref. No.	Part No.	Part Name & Description	Remarks
R781	ERJ6GEYJ473	Chip, 47k Ω 1/10W	
R782	ERDS1FJ680	Chip, 68 Ω 1/2W	
R786	ERJ8GEY0R00V	Chip, 0 Ω 1/8W	
R812	ERJ6GEYJ102	Chip, 1k Ω 1/10W	
R817	ERJ6GEYJ473	Chip, 47k Ω 1/10W	
CONNECTORs			
J1	K2HA104B0010	Jack, RCA	
CN251	YESAJ07008	2RCA (CD.C-IN)	
CN601	K1KB15B00010	Connector, 15P	
CN602	YESAE339	Connector, 4P	
CN661	YESAJ07007	Connector, 7P	
CN680	YESAE343	8P DIN Connector	
CN681	YESAE340	Connector, 22P	
CN701	K1FA116B0028	Connector, 16P	
COILs			
L401	G0C101K00010	Coil	
L50	YESLQ013	Coil	
L51	G1C150K00011	Coil	
L501	YESLA004	Coil	
L504	YESLA004	Coil	
L671	YESLQ012	Coil	
L701	J0JKA0000001	Coil	
L702	G0A201J00001	Coil	
CRYSTALs			
XL401	H0D720400003	Crystal	
XL501	YESXL019	Crystal	
XL601	YESXL017	Crystal	
XL602	H0A327200080	Crystal	
THERMISTOR			
PT701	YERT7AR4R7MT	Thermistor	
SWITCH			
SW601	K0L1BB000003	Switch	
SERGE PROTECTOR			
Z50	J0LE00000002	Serge Protector	
VARISTOR			
Z701	ERZS07DK470T	Varistor	
[7201-05-01] Display Block [CQ-DFX223N]			
IC's and TRANSISTORs			

IC's and TRANSISTORs

Ref. No.	Part No.	Part Name & Description	Remarks
IC901	YEAMLC75854T	IC	
IC905	B3MBZ0000006	IC	
Q901	B1GDCFJJ0008	Transistor	
Q902	B1GBCFNN0009	Transistor	
DIODEs			
D901	B3AAB0000143	LED	
D902	B3AAB0000143	LED	
D903	B3AAB0000143	LED	
D904	B3AAB0000143	LED	
D905	B3AAB0000143	LED	
D906	B3AAB0000143	LED	
D907	B3AAB0000143	LED	
D908	B3AAB0000143	LED	
D909	B3AAB0000143	LED	
D910	B3AAB0000143	LED	
D911	B3AAB0000143	LED	
D912	B3AAB0000143	LED	
D913	B3AAB0000143	LED	
D914	B3AAB0000143	LED	
D915	B3AAB0000143	LED	
D926	MAZ805600L	Zener Diode	
D927	MAZ805600L	Zener Diode	
D928	MAZ805600L	Zener Diode	
D929	MAZ805600L	Zener Diode	
D940	YESAD105	LED	
D941	YESAD105	LED	
D942	MA8047MTX	Zener Diode	
D943	MA8047MTX	Zener Diode	
D944	YESAD105	LED	
D945	MA8047MTX	Zener Diode	
CAPACITORs			
C910	YESCC233	Ceramic, 1000pF 50WV	
C911	YESCC229	Ceramic, 1 μ F 16WV	
C912	YESCC229	Ceramic, 1 μ F 16WV	
C914	YESCC228	Ceramic, 0.1 μ F 16WV	
C915	YESCC228	Ceramic, 0.1 μ F 16WV	
C916	YESCC228	Ceramic, 0.1 μ F 16WV	
C923	F1J1H681A025	Ceramic, 680pF 50WV	
RESISTORs			
R906	ERJ6GEYJ101	Chip, 100ohm; 1/10W	
R907	ERJ6GEYJ102	Chip, 1k Ω 1/10W	
R908	ERJ6GEYJ102	Chip, 1k Ω 1/10W	
R909	ERJ6GEYJ102	Chip, 1k Ω 1/10W	
R910	ERJ6GEYJ102	Chip, 1k Ω 1/10W	
R911	ERJ6GEYJ102	Chip, 1k Ω 1/10W	
R938	ERJ6GEYJ4R7	Chip, 4.7 Ω 1/10W	
R939	ERJ6GEYJ4R7	Chip, 4.7 Ω 1/10W	

Ref. No.	Part No.	Part Name & Description	Remarks
R940	ERJ8GEYJ471V	Chip, 470 Ω 1/8W	
R941	ERJ6GEYJ103	Chip, 10k Ω 1/10W	
R942	ERJ6GEYJ473	Chip, 47k Ω 1/10W	
R944	ERJ8GEYJ471V	Chip, 470 Ω 1/8W	
R946	ERJ8GEYJ471V	Chip, 470 Ω 1/8W	
R956	ERJ6GEYJ821	Chip, 820 Ω 1/10W	
R958	ERJ6GEY0R00V	Chip, 0 Ω 1/10W	
R959	ERJ6GEYJ511V	Chip, 510 Ω 1/10W	
R960	ERJ6GEYJ511V	Chip, 510 Ω 1/10W	
R961	ERJ6GEYJ511V	Chip, 510 Ω 1/10W	
R962	ERJ6GEYJ152	Chip, 1.5k Ω 1/10W	
R963	ERJ6GEYJ511V	Chip, 510 Ω 1/10W	
CONNECTOR			
CN901	YEAE012760	Connector 14P	
SWITCHEs			
SW901	K9AA024A0007	Switch	
SW903	K0H1BA000445	Switch	
SW904	K0H1BA000445	Switch	
SW905	K0H1BA000445	Switch	
SW907	K0H1BA000445	Switch	
SW908	K0H1BA000445	Switch	
SW909	K0H1BA000445	Switch	
SW910	K0H1BA000445	Switch	
SW911	K0H1BA000445	Switch	
SW912	K0H1BA000445	Switch	
SW913	K0H1BA000445	Switch	
SW914	K0H1BA000445	Switch	
SW915	K0H1BA000445	Switch	
SW916	K0H1BA000445	Switch	
SW917	K0H1BA000445	Switch	
SW918	K0H1BA000445	Switch	
LCD			
LCD901	YESXDCU007	LCD	
[7201-05-01] Display Block [CQ-DFX213N]			
IC's & TRANSISTORs			
IC901	YEAMLC75854T	IC	
IC905	B3MBZ0000006	IC	
Q901	B1GDCFJJ0008	Transistor	
Q902	B1GBCFNN0009	Transistor	
DIODEs			
D901	YESAD108	LED	
D902	YESAD108	LED	

Ref. No.	Part No.	Part Name & Description	Remarks
D903	**YESAD108**	**LED**	
D904	**YESAD108**	**LED**	
D905	**YESAD108**	**LED**	
D906	**YESAD108**	**LED**	
D907	**YESAD108**	**LED**	
D908	**YESAD108**	**LED**	
D909	**YESAD108**	**LED**	
D910	**YESAD108**	**LED**	
D911	**YESAD108**	**LED**	
D912	**YESAD108**	**LED**	
D913	**YESAD108**	**LED**	
D914	**YESAD108**	**LED**	
D915	**B3AAB0000143**	**LED**	
D926	**MAZ805600L**	**Zener Diode**	
D927	**MAZ805600L**	**Zener Diode**	
D928	**MAZ805600L**	**Zener Diode**	
D929	**MAZ805600L**	**Zener Diode**	
D940	**YESAD106**	**LED**	
D941	**YESAD106**	**LED**	
D942	**MA8047MTX**	**Zener Diode**	
D943	**MA8047MTX**	**Zener Diode**	
CAPACITORs			
C910	**YESCC233**	**Ceramic, 1000pF 50WV**	
C911	**YESCC229**	**Ceramic, 1 μ F 16WV**	
C912	**YESCC229**	**Ceramic, 1 μ F 16WV**	
C914	**YESCC228**	**Ceramic, 0.1 μ F 16WV**	
C915	**YESCC228**	**Ceramic, 0.1 μ F 16WV**	
C916	**YESCC228**	**Ceramic, 0.1 μ F 16WV**	
C923	**F1J1H681A025**	**Ceramic, 680pF 50WV**	
RESISTORs			
R906	**ERJ6GEYJ101**	**Chip, 100ohm; 1/10W**	
R907	**ERJ6GEYJ102**	**Chip, 1k Ω 1/10W**	
R908	**ERJ6GEYJ102**	**Chip, 1k Ω 1/10W**	
R909	**ERJ6GEYJ102**	**Chip, 1k Ω 1/10W**	
R910	**ERJ6GEYJ102**	**Chip, 1k Ω 1/10W**	
R911	**ERJ6GEYJ102**	**Chip, 1k Ω 1/10W**	
R938	**ERJ6GEYJ4R7**	**Chip, 4.7 Ω 1/10W**	
R939	**ERJ6GEYJ4R7**	**Chip, 4.7 Ω 1/10W**	
R940	**ERJ8GEYJ471V**	**Chip, 470 Ω 1/8W**	
R941	**ERJ6GEYJ103**	**Chip, 10k Ω 1/10W**	
R942	**ERJ6GEYJ473**	**Chip, 47k Ω 1/10W**	
R944	**ERJ8GEYJ471V**	**Chip, 470 Ω 1/8W**	
R952	**YESRG032**	**Chip, 200 Ω 1/8W**	
R956	**ERJ6GEYJ821**	**Chip, 820 Ω 1/10W**	
R958	**ERJ6GEY0R00V**	**Chip, 0 Ω 1/10W**	
R959	**ERJ6GEYJ101**	**Chip, 100ohm; 1/10W**	
R960	**ERJ6GEYJ101**	**Chip, 100ohm; 1/10W**	
R961	**ERJ6GEYJ101**	**Chip, 100ohm; 1/10W**	

Ref. No.	Part No.	Part Name & Description	Remarks
R963	**ERJ6GEYJ101**	**Chip, 100ohm; 1/10W**	
CONNECTOR			
CN901	**YEAE012760**	**Connector 14P**	
SWITCHEs			
SW901	**K9AA024A0007**	**Switch**	
SW903	**K0H1BA000445**	**Switch**	
SW904	**K0H1BA000445**	**Switch**	
SW905	**K0H1BA000445**	**Switch**	
SW907	**K0H1BA000445**	**Switch**	
SW908	**K0H1BA000445**	**Switch**	
SW909	**K0H1BA000445**	**Switch**	
SW910	**K0H1BA000445**	**Switch**	
SW911	**K0H1BA000445**	**Switch**	
SW912	**K0H1BA000445**	**Switch**	
SW913	**K0H1BA000445**	**Switch**	
SW914	**K0H1BA000445**	**Switch**	
SW915	**K0H1BA000445**	**Switch**	
SW916	**K0H1BA000445**	**Switch**	
SW917	**K0H1BA000445**	**Switch**	
SW918	**K0H1BA000445**	**Switch**	
LCD			
LCD901	**YESXDCU007**	**LCD**	
[7201-05-01] Display Block [CQ-DFX203N]			
IC's and TRANSISTORs			
IC901	**YEAMLC75854T**	**IC**	
IC905	**B3MBZ0000006**	**IC**	
Q901	**B1GDCFJJ0008**	**Transistor**	
Q902	**B1GBCFNN0009**	**Transistor**	
DIODEs			
D901	**YESAD110**	**LED**	
D902	**YESAD110**	**LED**	
D903	**YESAD109**	**LED**	
D904	**YESAD110**	**LED**	
D905	**YESAD110**	**LED**	
D906	**YESAD109**	**LED**	
D907	**YESAD110**	**LED**	
D908	**YESAD110**	**LED**	
D909	**YESAD110**	**LED**	
D910	**YESAD110**	**LED**	
D911	**YESAD110**	**LED**	
D912	**YESAD110**	**LED**	
D913	**YESAD110**	**LED**	
D914	**YESAD110**	**LED**	

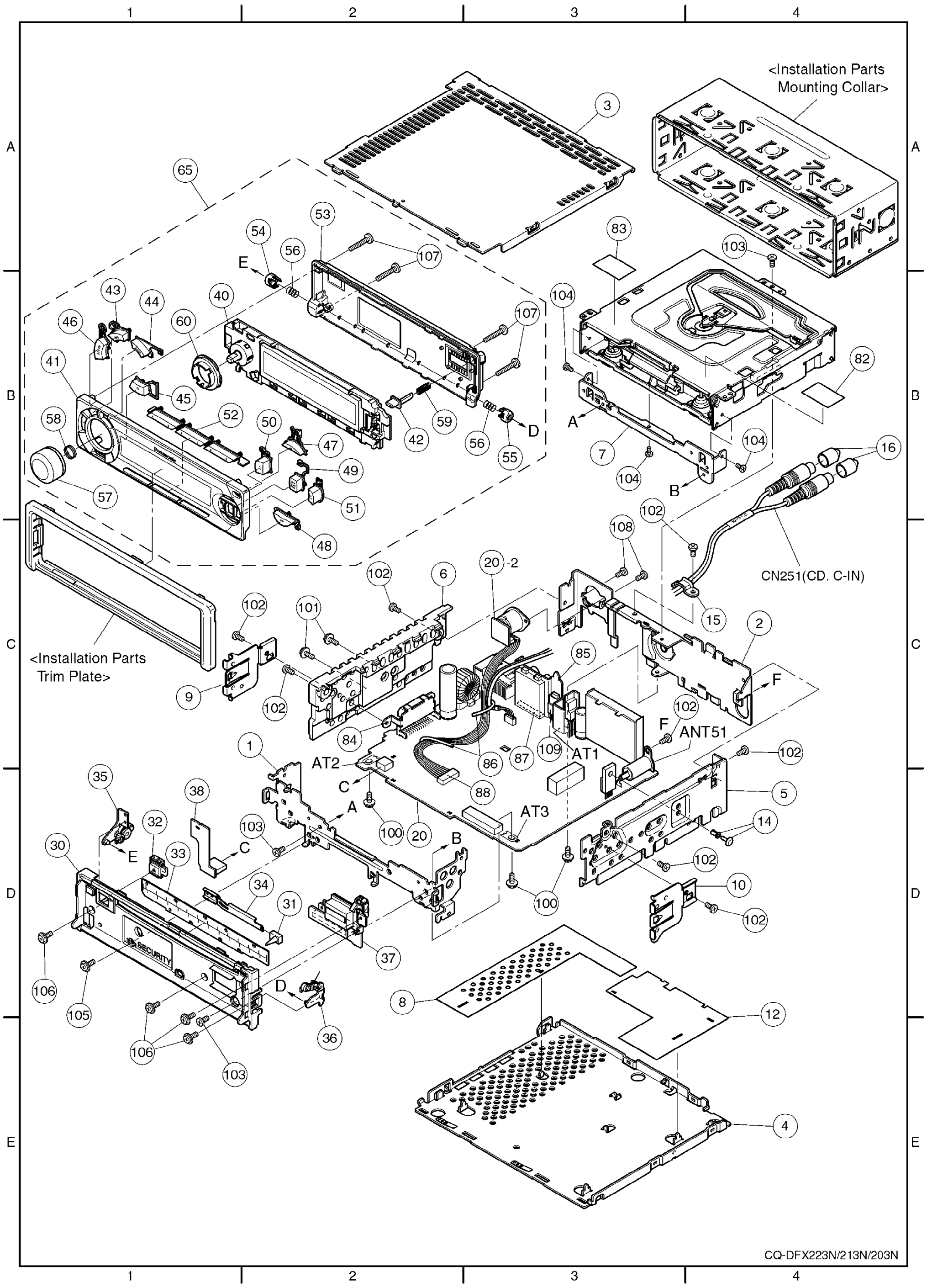
Ref. No.	Part No.	Part Name & Description	Remarks
D915	B3AAB0000143	LED	
D926	MAZ805600L	Zener Diode	
D927	MAZ805600L	Zener Diode	
D928	MAZ805600L	Zener Diode	
D929	MAZ805600L	Zener Diode	
D940	YESAD107	LED	
D941	YESAD107	LED	
D942	MA8047MTX	Zener Diode	
D943	MA8047MTX	Zener Diode	
CAPACITORs			
C910	YESCC233	Ceramic, 1000pF 50WV	
C911	YESCC229	Ceramic, 1 μ F 16WV	
C912	YESCC229	Ceramic, 1 μ F 16WV	
C914	YESCC228	Ceramic, 0.1 μ F 16WV	
C915	YESCC228	Ceramic, 0.1 μ F 16WV	
C916	YESCC228	Ceramic, 0.1 μ F 16WV	
C923	F1J1H681A025	Ceramic, 680pF 50WV	
RESISTORs			
R906	ERJ6GEYJ101	Chip, 100ohm; 1/10W	
R907	ERJ6GEYJ102	Chip, 1k Ω 1/10W	
R908	ERJ6GEYJ102	Chip, 1k Ω 1/10W	
R909	ERJ6GEYJ102	Chip, 1k Ω 1/10W	
R910	ERJ6GEYJ102	Chip, 1k Ω 1/10W	
R911	ERJ6GEYJ102	Chip, 1k Ω 1/10W	
R938	ERJ6GEYJ4R7	Chip, 4.7 Ω 1/10W	
R939	ERJ6GEYJ4R7	Chip, 4.7 Ω 1/10W	
R940	ERJ8GEYJ331V	Chip, 330 Ω 1/8W	
R941	ERJ6GEYJ103	Chip, 10k Ω 1/10W	
R942	ERJ6GEYJ473	Chip, 47k Ω 1/10W	
R944	ERJ8GEYJ331V	Chip, 330 Ω 1/8W	
R952	ERJ8GEYJ271	Chip, 270 Ω 1/8W	
R956	ERJ8GEYJ331V	Chip, 330 Ω 1/8W	
R958	ERJ6GEY0R00V	Chip, 0 Ω 1/10W	
R959	YESRG031	Chip, 110 Ω 1/10W	
R960	YESRG031	Chip, 110 Ω 1/10W	
R961	YESRG031	Chip, 110 Ω 1/10W	
R963	YESRG031	Chip, 110 Ω 1/10W	
CONNECTOR			
CN901	YEAE012760	Connector 14P	
SWITCHEs			
SW901	K9AA024A0007	Switch	
SW903	K0H1BA000445	Switch	
SW904	K0H1BA000445	Switch	
SW905	K0H1BA000445	Switch	

Ref. No.	Part No.	Part Name & Description	Remarks
SW907	**K0H1BA000445**	**Switch**	
SW908	**K0H1BA000445**	**Switch**	
SW909	**K0H1BA000445**	**Switch**	
SW910	**K0H1BA000445**	**Switch**	
SW911	**K0H1BA000445**	**Switch**	
SW912	**K0H1BA000445**	**Switch**	
SW913	**K0H1BA000445**	**Switch**	
SW914	**K0H1BA000445**	**Switch**	
SW915	**K0H1BA000445**	**Switch**	
SW916	**K0H1BA000445**	**Switch**	
SW917	**K0H1BA000445**	**Switch**	
SW918	**K0H1BA000445**	**Switch**	
LCD			
LCD901	**YESXDCU007**	**LCD**	
[7201-02-14] Connector Block			
CN640	**K1KA15A00096**	**Connector 15P**	
CP641	**YEAE012761**	**Connector 14P**	
[7201-02-13] Eject Block			
D642	**B3ABB0000154**	**LED**	
D643	**B3ABB0000154**	**LED**	
SW610	**K0H1BA000445**	**Switch**	
CJ642	**K1KA04A00296**	**Connector 4P**	
Accessories			
PRINTING			
	YEFM283971	**Operating Instructions**	
	YEFM292934	**Installation Instructions (A)**	
	YEFM292935	**Installation Instructions (B)**	
INSTALLATION PARTs			
	YEFA131733	**Removal Face Plate Case**	
	YEAJ02874	**Power Connector**	
	YEP0FX3316	**Screws Kit (Bolt, ISO antenna adapter,Lock cancel plate)**	
	YESFX018006	**Mounting Collar**	
	YESFC05016	**Trim Plate**	
MECHANICAL PARTS			
MISCELLANEOUS			
ANT51	**YM104C700ZA**	**ANT Jack**	
AT1	**K4ZZ01000048**	**Earth Terminal**	
AT2	**K4ZZ01000048**	**Earth Terminal**	
AT3	**K4ZZ01000048**	**Earth Terminal**	
1	**YESFA01066**	**Front Chassis**	

Ref. No.	Part No.	Part Name & Description	Remarks
2	YESFA08017	Rear Plate 223N	A
	YESFA08016	Rear Plate 213N	B
	YESFA08015	Rear Plate 203N	C
3	YESFA03053	Top Cover A	
4	YESFA05034	Bottom Cover Assy	
5	YESFA09004	Side Plate	
6	YESFF01079	Heat Sink	
7	YESFG02027	Front Bracket	
8	YESFV01061	Insulated Sheet L	
9	YESFX005133	Plate Spring L	
10	YESFX005134	Plate Spring R	
12	YESFV01062	Insulated Sheet R	
14	YESFX014007	Rivet	
15	YESFX007024	Cord Clamper	
16	YESFR04010	RCA Cap	
20	YESAP264	Main PCB Assy	RTL
30	YESFC02079	Escutcheon	
31	YEFX9992957	Cap Lever Detect	
32	YESFE13116	Eject Button	
33	YESFS04016	Dust Felt	
34	YESFX999053	Lever Spring Detect	
35	YESFX999050	Bracket Arm L Assy	
36	YESFX999051	Bracket Arm R Assy	
37	YESAP252	CN PCB/BKT Hook Assy	RTL
38	YESAP253	EJ PCB Assy	RTL
40	YESAP267	Display PCB Assy	A, RTL
	YESAP266	Display PCB Assy	B, RTL
	YESAP265	Display PCB Assy	C, RTL
41	YESFC02089	Escutcheon Assy	A
	YESFC02088	Escutcheon Assy	B
	YESFC02087	Escutcheon Assy	C
42	YESFE13115	Button (OPEN)	
43	YESFE13108	Button (MUTE)	
44	YESFE13109	Button (S HDB)	
45	YESFE13124	Button (TA)	
46	YESFE13111	Button (SOURCE)	
47	YESFE13125	Button (AF)	
48	YESFE13113	Button (DISP)	
49	YESFE13114	Button (BAND APM)	
50	YESFE13117	Button (TUNE DOWN)	
51	YESFE13118	Button (TUNE UP)	
52	YESFE13119	Preset Button	
53	YESFA07008	Rear Cover	
54	YESFX999054	Rear Cover Metal L	
55	YESFX999055	Rear Cover Metal R	
56	YESFX005135	Metal Spring	
57	YESFE02017	Vol Knob	
58	YESFX005131	Knob Spring	
59	YESFX005136	Open Button Spring	
60	YESFL02041	Indicator (Vol)	
65	YESSDF0111	Removable Face Plate Unit	A, RTL
	YESSDF0110	Removable Face Plate Unit	B, RTL
	YESSDF0109	Removable Face Plate Unit	C, RTL
82	YESFM01083	Laser Seal (3 Language)	

Ref. No.	Part No.	Part Name & Description	Remarks
83	YESFM01084	Laser Seal (4 Language)	
84	YESFG02029	PWR IC Bracket	
85	YESFG02030	RCA Bracket	
86	YESFX007023	Style Pin	
87	YESFL02044	PCB Sheet	
88	YESAJ07007	Connector, 7P w/wire	
100	YESJS01165	Cup Screw S Tite M3.0*6.0	
101	YESJS01160	Cap Screw 3*6	
102	YESJT03067	Tapping ScrewiBindjS Tite M3*6	
103	YESJS01163	S Tite Bind 2.6*6 Black CR	
104	YESJS01162	C Tite 2.0*3.0	
105	YESJS01161	Cap Screw 2*5 Black CR	
106	YESJS01159	Cap Screw 2*4	
107	YESJS01164	P Tite 2*8 Black CR	
108	YESJS01166	Screw Bind 3.0*6.0	
109	YESJT03069	Tapping Screw Bind 2.6*8	

14. EXPLODED VIEW [CQ-DFX223N/DFX213N/DFX203N]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CN251(CD. C-IN)
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101
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Trim Plate>
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ANT51
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AT1
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AT2
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C
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A
AT3
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30
E
33
C
102
34
10
31
100
102
37
106
D
8
12
105
36
106
103
4
CQ-DFX223N/213N/203N

15. CD PLAYER PARTS LIST [CQ-DFX683N]

Notes :

1. **Be sure to make your orders of replacement parts according to this list.**
2. **Important safety notice: Components, identified by ⚠ mark have special characteristics important for safety. When replacing any**

of these components, use only manufacturer's specified parts.

3. **Location keys in the remarks column indicates the general location of the parts shown in the exploded drawing, as in a road map.**
4. **The marking (RTL) indicates that Retention Time is limited for this item. After the discontinuation of assembly in production, the item will continue to be available for a specific period of time. The retention period of availability is dependent on the type of assembly, and in accordance with the laws governing part and product retention. After the end of this period, the assembly will no longer be available.**
    - **Order intake period is basically six months after the first shipment.**

Ref. No.	Part No.	Part Name & Description	Remarks
[3032-14-02] CD Servo Block			
IC's and TRANSISTORs			
IC201	MN6627482WB	IC	
IC202	YESAM163	IC	
IC203	YESAM166	IC	
IC204	C0ABBB000073	IC	
IC401	YESAM176	IC	
IC402	YESAM172	IC	
IC406	YESAM171	IC	
IC409	YESAM167	IC	
IC411	YESAM178	IC	
Q101	B1BDBC000001	Transistor	
Q201	B1BDBC000001	Transistor	
Q203	YESAN060	Transistor	
CAPACITORs			
C101	YESCC203	Chip, 220pF 50WV	
C102	YESCC187	Chip, 0.1 μ F 25WV	
C103	YESCC187	Chip, 0.1 μ F 25WV	
C104	YESCC206	Chip, 0.047 μ F 25WV	
C105	F1H1H2220004	Chip, 0.0047 μ F 25WV	
C106	YESCC207	Chip, 0.001 μ F 50WV	
C107	YESCC206	Chip, 0.047 μ F 25WV	
C108	YESCC204	Chip, 330pF 50WV	
C109	YESCC187	Chip, 0.1 μ F 25WV	
C110	YESCC187	Chip, 0.1 μ F 25WV	
C111	YESCC186	Chip, 0.022 μ F 50WV	
C112	YESCC183	Chip, 0.0022 μ F 50WV	

Ref. No.	Part No.	Part Name & Description	Remarks
C113	YESCC208	Chip, 0.0015 μ F 50WV	
C114	YESCC207	Chip, 0.001 μ F 50WV	
C115	YESCC187	Chip, 0.1 μ F 25WV	
C116	YESCC187	Chip, 0.1 μ F 25WV	
C121	YESCC187	Chip, 0.1 μ F 25WV	
C122	YESCC207	Chip, 0.001 μ F 50WV	
C123	YESCC186	Chip, 0.022 μ F 50WV	
C124	YESCC187	Chip, 0.1 μ F 25WV	
C125	YESCC207	Chip, 0.001 μ F 50WV	
C126	YESCC210	Chip, 1 μ F 16WV	
C127	YESCC207	Chip, 0.001 μ F 50WV	
C128	YESCC205	Chip, 0.22 μ F 10WV	
C129	YESCC187	Chip, 0.1 μ F 25WV	
C130	YESCC207	Chip, 0.001 μ F 50WV	
C131	YESCC187	Chip, 0.1 μ F 25WV	
C132	YESCC187	Chip, 0.1 μ F 25WV	
C135	YESCC187	Chip, 0.1 μ F 25WV	
C136	YESCC187	Chip, 0.1 μ F 25WV	
C137	YESCC210	Chip, 1 μ F 16WV	
C138	YESCC210	Chip, 1 μ F 16WV	
C139	YESCC187	Chip, 0.1 μ F 25WV	
C140	YESCC187	Chip, 0.1 μ F 25WV	
C141	YESCC187	Chip, 0.1 μ F 25WV	
C151	YESCC188	Electrolytic, 10micro;F 16WV	
C152	YESCC213	Electrolytic, 22micro;F 6.3WV	
C153	YESCC213	Electrolytic, 22micro;F 6.3WV	
C154	YESCC215	Electrolytic, 220micro;F 10WV	
C203	YESCC209	Chip, 0.0033 μ F 50WV	
C204	YESCC209	Chip, 0.0033 μ F 50WV	
C205	YESCC187	Chip, 0.1 μ F 25WV	
C207	YESCC187	Chip, 0.1 μ F 25WV	
C208	YESCC202	Chip, 22pF 50WV	
C251	YESCC215	Electrolytic, 220micro;F 10WV	
C252	YESCC214	Electrolytic, 47micro;F 6.3WV	
C253	YESCC215	Electrolytic, 220micro;F 10WV	
C301	YESCC207	Chip, 0.001 μ F 50WV	
C302	YESCC207	Chip, 0.001 μ F 50WV	
C311	YESCC207	Chip, 0.001 μ F 50WV	
C312	YESCC207	Chip, 0.001 μ F 50WV	
C321	YESCC187	Chip, 0.1 μ F 25WV	
C356	YESCC213	Electrolytic, 22micro;F 6.3WV	
C357	YESCC214	Electrolytic, 47micro;F 6.3WV	
C358	YESCC213	Electrolytic, 22micro;F 6.3WV	
C359	YESCC216	Electrolytic, 100micro;F 16WV	
C360	YESCC188	Electrolytic, 10micro;F 16WV	
C401	YESCC187	Chip, 0.1 μ F 25WV	
C402	YESCC187	Chip, 0.1 μ F 25WV	

Ref. No.	Part No.	Part Name & Description	Remarks
C403	YESCC187	Chip, 0.1 μ F 25WV	
C404	YESCC187	Chip, 0.1 μ F 25WV	
C405	YESCC187	Chip, 0.1 μ F 25WV	
C406	YESCC188	Chip, 0.1 μ F 26WV	
C407	YESCC189	Chip, 0.1 μ F 27WV	
C408	YESCC190	Chip, 0.1 μ F 28WV	
C409	YESCC187	Chip, 0.1 μ F 25WV	
C410	YESCC187	Chip, 0.1 μ F 25WV	
C411	YESCC188	Chip, 0.1 μ F 26WV	
C412	YESCC189	Chip, 0.1 μ F 27WV	
C413	YESCC190	Chip, 0.1 μ F 28WV	
C414	YESCC191	Chip, 0.1 μ F 29WV	
C418	YESCC187	Chip, 0.1 μ F 25WV	
C426	YESCC187	Chip, 0.1 μ F 25WV	
C433	YESCC210	Chip, 1 μ F 16WV	
C434	YESCC210	Chip, 1 μ F 16WV	
C435	YESCC187	Chip, 0.1 μ F 25WV	
C436	YESCC187	Chip, 0.1 μ F 25WV	
C437	YESCC210	Chip, 1 μ F 16WV	
C452	YESCC188	Electrolytic, 10micro;F 16WV	
C463	YESCC214	Electrolytic, 47micro;F 6.3WV	
C464	YESCC214	Electrolytic, 47micro;F 6.3WV	
R435	YESCC187	Chip, 0.1 μ F 25WV	
RESISTORs			
JP101	ERJ8GEY0R00V	Chip, 0 Ω 1/8W	
JP102	ERJ8GEY0R00V	Chip, 0 Ω 1/8W	
L302	ERJ6GEY0R00	Chip, 0 Ω 1/10W	
L303	ERJ6GEY0R00	Chip, 0 Ω 1/10W	
L304	ERJ6GEY0R00	Chip, 0 Ω 1/10W	
L305	ERJ6GEY0R00	Chip, 0 Ω 1/10W	
R101	ERJ3GEYJ4R7V	Chip, 4.7 Ω 1/16W	
R103	ERJ3GEYJ152V	Chip, 1.5k Ω 1/16W	
R104	ERJ3GEYJ471V	Chip, 470 Ω 1/16W	
R105	ERJ3GEYJ272V	Chip, 2.7k Ω 1/16W	
R106	ERJ3GEYJ103V	Chip, 10k Ω 1/16W	
R107	ERJ3GEYJ272V	Chip, 2.7k Ω 1/16W	
R108	ERJ3GEYJ394V	Chip, 390k Ω 1/16W	
R109	ERJ3GEYJ154V	Chip, 150k Ω 1/16W	
R110	ERJ3GEYJ103V	Chip, 10k Ω 1/16W	
R111	ERJ3GEYJ183V	Chip, 18k Ω 1/16W	
R112	ERJ3GEYJ244V	Chip, 240k Ω 1/16W	
R113	ERJ3GEYJ124V	Chip, 120k Ω 1/16W	
R114	ERJ3GEY0R00V	Chip, 0 Ω 1/16W	
R115	ERJ3GEYJ222V	Chip, 2.2k Ω 1/16W	
R116	ERJ3GEYJ222V	Chip, 2.2k Ω 1/16W	
R117	ERJ3GEY0R00V	Chip, 0 Ω 1/16W	

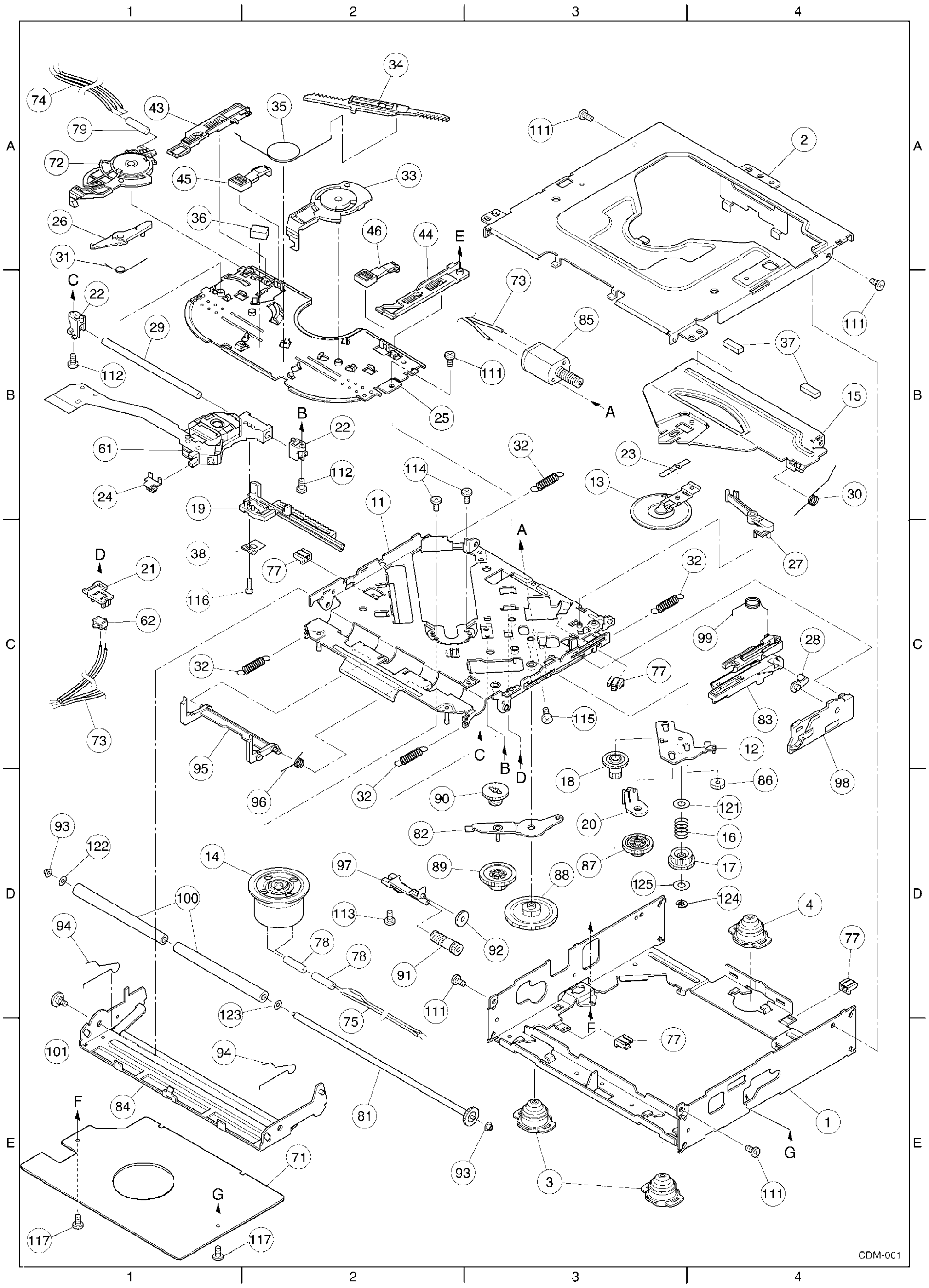
Ref. No.	Part No.	Part Name & Description	Remarks
R118	ERJ3GEYJ153V	Chip, 15k Ω 1/16W	
R119	ERJ3GEYJ102V	Chip, 1k Ω 1/16W	
R120	ERJ3GEY0R00V	Chip, 0 Ω 1/16W	
R121	ERJ3GEYJ224V	Chip, 240k Ω 1/16W	
R122	ERJ3GEYJ563V	Chip, 56k Ω 1/16W	
R123	ERJ3GEYJ124V	Chip, 120k Ω 1/16W	
R125	ERJ3GEYJ471V	Chip, 470 Ω 1/16W	
R126	ERJ3GEYJ272V	Chip, 2.7k Ω 1/16W	
R127	RK1J224JT	220k Ω	
R128	ERJ3GEYJ221V	Chip, 220 Ω 1/16W	
R129	ERJ3GEYJ682V	Chip, 6.8k Ω 1/16W	
R130	ERJ3GEYJ105V	Chip, 1M Ω 1/16W	
R131	ERJ3GEYJ222V	Chip, 2.2k Ω 1/16W	
R133	ERJ3GEYJ222V	Chip, 2.2k Ω 1/16W	
R136	ERJ3GEYJ222V	Chip, 2.2k Ω 1/16W	
R137	ERJ3GEYJ102V	Chip, 1k Ω 1/16W	
R138	ERJ3GEYJ102V	Chip, 1k Ω 1/16W	
R139	ERJ3GEYJ102V	Chip, 1k Ω 1/16W	
R140	ERJ3GEYJ102V	Chip, 1k Ω 1/16W	
R141	ERJ3GEYJ102V	Chip, 1k Ω 1/16W	
R142	ERJ3GEYJ102V	Chip, 1k Ω 1/16W	
R201	ERJ3GEYJ682V	Chip, 6.8k Ω 1/16W	
R202	ERJ3GEY0R00V	Chip, 0 Ω 1/16W	
R204	ERJ3GEYJ102V	Chip, 1k Ω 1/16W	
R205	ERJ3GEY0R00V	Chip, 0 Ω 1/16W	
R206	ERJ3GEYJ183V	Chip, 18k Ω 1/16W	
R207	ERJ3GEYJ512V	Chip, 5.1k Ω 1/16W	
R208	ERJ3GEY0R00V	Chip, 0 Ω 1/16W	
R209	ERJ3GEYJ512V	Chip, 5.1k Ω 1/16W	
R210	ERJ3GEY0R00V	Chip, 0 Ω 1/16W	
R211	ERJ3GEYJ273V	Chip, 27k Ω 1/16W	
R212	ERJ3GEYJ473V	Chip, 47k Ω 1/16W	
R301	ERJ3GEYJ392V	Chip, 3.9k Ω 1/16W	
R302	ERJ3GEYJ392V	Chip, 3.9k Ω 1/16W	
R303	ERJ3GEYJ153V	Chip, 15k Ω 1/16W	
R304	ERJ3GEYJ103V	Chip, 10k Ω 1/16W	
R305	RK1J221JT	220 Ω	
R311	ERJ3GEYJ392V	Chip, 3.9k Ω 1/16W	
R312	ERJ3GEYJ392V	Chip, 3.9k Ω 1/16W	
R313	ERJ3GEYJ153V	Chip, 15k Ω 1/16W	
R314	ERJ3GEYJ103V	Chip, 10k Ω 1/16W	
R315	ERJ3GEYJ221V	Chip, 220 Ω 1/16W	
R322	ERJ3GEYJ103V	Chip, 10k Ω 1/16W	
R323	ERJ3GEYJ103V	Chip, 10k Ω 1/16W	
R324	ERJ3GEYJ104V	Chip, 100k Ω 1/16W	
R325	ERJ3GEYJ104V	Chip, 100k Ω 1/16W	
R326	ERJ3GEYJ101V	Chip, 100 Ω 1/16W	
R327	ERJ3GEYJ103V	Chip, 10k Ω 1/16W	
R328	ERJ3GEYJ103V	Chip, 10k Ω 1/16W	
R329	ERJ3GEYJ102V	Chip, 1k Ω 1/16W	
R401	ERJ3GEYJ103V	Chip, 10k Ω 1/16W	

Ref. No.	Part No.	Part Name & Description	Remarks
R402	ERJ3GEYJ103V	Chip, 10k Ω 1/16W	
R403	ERJ3GEYJ103V	Chip, 10k Ω 1/16W	
R404	ERJ3GEYJ103V	Chip, 10k Ω 1/16W	
R408	ERJ3GEYJ472V	Chip, 4.7k Ω 1/16W	
R409	ERJ3GEYJ472V	Chip, 4.7k Ω 1/16W	
R414	ERJ3GEYJ473V	Chip, 47k Ω 1/16W	
R415	ERJ3GEYJ473V	Chip, 47k Ω 1/16W	
R416	ERJ3GEYJ473V	Chip, 47k Ω 1/16W	
R425	ERJ3GEYJ101V	Chip, 100 Ω 1/16W	
R428	ERJ3GEYJ330V	Chip, 33 Ω 1/16W	
R429	ERJ3GEYJ221V	Chip, 220 Ω 1/16W	
R430	ERJ3GEYJ561V	Chip, 560 Ω 1/16W	
R431	ERJ3GEYJ472V	Chip, 4.7k Ω 1/16W	
R432	ERJ3GEYJ103V	Chip, 10k Ω 1/16W	
R434	ERJ3GEYJ104V	Chip, 100k Ω 1/16W	
R478	ERJ3GEYJ560V	Chip, 56 Ω 1/16W	
R480	ERJ3GEYJ560V	Chip, 56 Ω 1/16W	
R481	ERJ3GEYJ472V	Chip, 4.7k Ω 1/16W	
R482	ERJ3GEYJ222V	Chip, 2.2k Ω 1/16W	
R483	ERJ3GEYJ222V	Chip, 2.2k Ω 1/16W	
RESISTOR NETWORKs			
RA401	YESXA003	Resistor Network	
RA402	YESXA003	Resistor Network	
RA403	YESXA003	Resistor Network	
RA405	YESXA003	Resistor Network	
RA406	YESXA003	Resistor Network	
RA407	YESXA003	Resistor Network	
RA408	YESXA003	Resistor Network	
RA409	YESXA003	Resistor Network	
RA410	YESXA003	Resistor Network	
RA412	YESXA002	Resistor Network	
RA413	YESXA003	Resistor Network	
RA414	YESXA002	Resistor Network	
CRYSTAL			
X401	YESXL018	Crystal OSC	
COILs			
L301	YESLQ011	Coil	
L401	YESLQ014	Coil	
L402	YESLQ014	Coil	
L403	YESLQ014	Coil	
CONNECTORs			
CN101	YESAE345	Connector 18P	
CN102	K1MN16B00036	FFC/FPC Connector 16P	

Ref. No.	Part No.	Part Name & Description	Remarks
MECHANICAL PARTS			
MISCELLANEOUS			
1	YERFA01001	Frame M	
2	YERFA01002	Top cover M	
3	YERFS04003	Damper F	
4	YERFS04004	Damper R	
11	YERFA01005	Chassis Rivet S Ass'y (M)	
12	YERFX046001	Change Plate Rivet Ass'y (M)	
13	YERFX007001	Clamper Ass'y	
14	YERAK0001	Spindle Motor (M) Ass'y	
15	YERFX046002	Clamper Arm M	
16	YERFX005001	Change Gear Spring	
17	YERFX03001	Change Gear 2	
18	YERFX03002	Feed Gear	
19	YERFX03003	Feed Rack M	
20	YERFX046003	Change Lock Lever M	
21	YERFW04001	Feed SW Holder (M)	
22	YERFW04002	PU Shaft Holder(M)	
23	YERFX005002	Clamper Sub Spring	
24	YERFW04003	FD Sub Holder M	
25	YERFA01006	Top Plate S	
26	YERFX046004	Select Lock Arm	
27	YERFX046005	Trigger Arm M	
28	YERFX046006	Slide Hook	
29	YERFW01001	PU Shaft M	
30	YERFX005003	Clamper Arm Spring M	
31	YERFX005004	Select Lock Arm Spring	
32	YERFX005013	Suspension Spring MS	
33	YERFX046007	Select Arm R	
34	YERFX03004	Link Plate	
35	YESFX005137	Link Plate Spring	
36	YERFS01001	Cushion F	
37	YERFS01002	Cushion R	
38	YERFX005014	Feed SPR Plate M	
43	YERFX046008	Select Plate L	
44	YERFX046009	Select Plate R	
45	YERFX046010	Select Piece L	
46	YERFX046011	Select Piece R	
61	YESSZCDM002	Pick Up RD-DAP005-TN	
62	YERAS0001	DET SW ESE 22MH55	
71	YESAP255	Servo PCB Ass'y	RTL
72	YERAS0002	Mode SW	
73	YESAJ02015	LD Wire MS	
74	YESAJ02013	SW Wire S	
75	YESAJ02012	SP Wire S	
77	YERFX999001	Wire Clamper M	
78	YESFX024021	Wire Tube SPM	
79	YESFX024022	Wire Tube MSW	
81	YERFX03005	Roller Shaft Ass'y	
82	YERFX046012	Loading Gear Plate Rivet Ass'y	
83	YERFX046013	Loading Plate Ass'y	
84	YERFX046014	Lock Arm Rivet Ass'y	
85	YERAK0002	Loading/Feed Motor Ass'y(MB)	

Ref. No.	Part No.	Part Name & Description	Remarks
86	YERFX03006	Loading Gear 1	
87	YERFX03007	Loading Gear 2	
88	YERFX03008	Loading Gear 3	
89	YERFX03009	Loading Gear 4	
90	YERFX03010	Loading Gear 5	
91	YERFX03011	Loading Gear 6	
92	YERFX03012	Loading Gear 7	
93	YERFW04004	Roller Guide	
94	YERFX005007	Roller Guide Spring	
95	YERFX046015	Disc Stopper Arm	
96	YERFX005008	Disc Stop Arm Spring	
97	YERFX046016	LD Gear Bracket	
98	YESFX046133	L Slide Plate	
99	YERFX005009	Loading Plate Spring	
100	YESFX046136	LDG Roller	
101	YERJS01001	PK Collar Screw A	
111	YERJT01001	Tapping Screw 2~3	
112	YERJT01002	Tapping Screw 2~4	
113	YEJT03117	Tapping Bind Screw 2~4	
114	YERJS01002	Camera Screw 1.7~1.8	
115	YERJS01003	Camera Screw 2~2	
116	YERJS01004	Camera Tapping Screw P3 M1.7~5	
117	YESJT03070	Tapping Screw (Metal) 2.0~4.0	
121	YERJW01001	PW 3.5~8~0.3	
122	YERJW01002	HLW 1.85~5~0.13	
123	YERJW01003	Lumilar Washer 3.1~6~0.1	
124	YEJE01028	E Ring S 1.5	
125	YERJW01005	PW 2.1~4~0.13	

16. EXPLODED VIEW (CD Deck) [CQ-DFX683N]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123
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F
77
101
94
84
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CDM-001

17. CD PLAYER PARTS LIST [CQ-DFX223N/213N/203N]

Notes :

1. **Be sure to make your orders of replacement parts according to this list.**
2. **Important safety notice: Components, identified by ⚠ mark have**

special characteristics important for safety. When replacing any of these components, use only manufacturer's specified parts.

3. Location keys in the remarks column indicates the general location of the parts shown in the exploded drawing, as in a road map.
4. The marking (RTL) indicates that Retention Time is limited for this item. After the discontinuation of assembly in production, the item will continue to be available for a specific period of time. The retention period of availability is dependent on the type of assembly, and in accordance with the laws governing part and product retention. After the end of this period, the assembly will no longer be available.
    - Order intake period is basically six months after the first shipment.

Ref. No.	Part No.	Part Name & Description	Remarks
[3032-14-03] CD Servo Block			
IC's and TRANSISTORs			
IC1	C1BB00000665	IC	
IC4	C0GBY0000020	IC	
Q2	B1BDBC000001	Transistor	
DIODE			
D2	YESAD093	Diode	
CAPACITORs			
C1	YESCC181	Chip, 27pF 50WV	
C2	YESCC181	Chip, 27pF 50WV	
C3	YESCC180	Chip, 8pF 50WV	
C4	YESCC181	Chip, 27pF 50WV	
C5	YESCC179	Chip, 4pF 50WV	
C6	YESCC187	Chip, 0.1 μ F 25WV	
C7	YESCC187	Chip, 0.1 μ F 25WV	
C8	F1H1H2220004	Chip, 0.0022 μ F 50WV	
C9	YESCC187	Chip, 0.1 μ F 25WV	
C10	YESCC187	Chip, 0.1 μ F 25WV	
C11	YESCC187	Chip, 0.1 μ F 25WV	
C12	YESCC187	Chip, 0.1 μ F 25WV	
C16	YESCC195	Chip, 0.1micro;F 50WV	
C17	YESCC187	Chip, 0.1 μ F 25WV	
C19	YESCC187	Chip, 0.1 μ F 25WV	
C20	F1H1H103A783	Chip, 0.01 μ F 50WV	
C21	F1H1H103A783	Chip, 0.01 μ F 50WV	
C24	YESCC188	Electrolytic, 10micro;F 16WV	

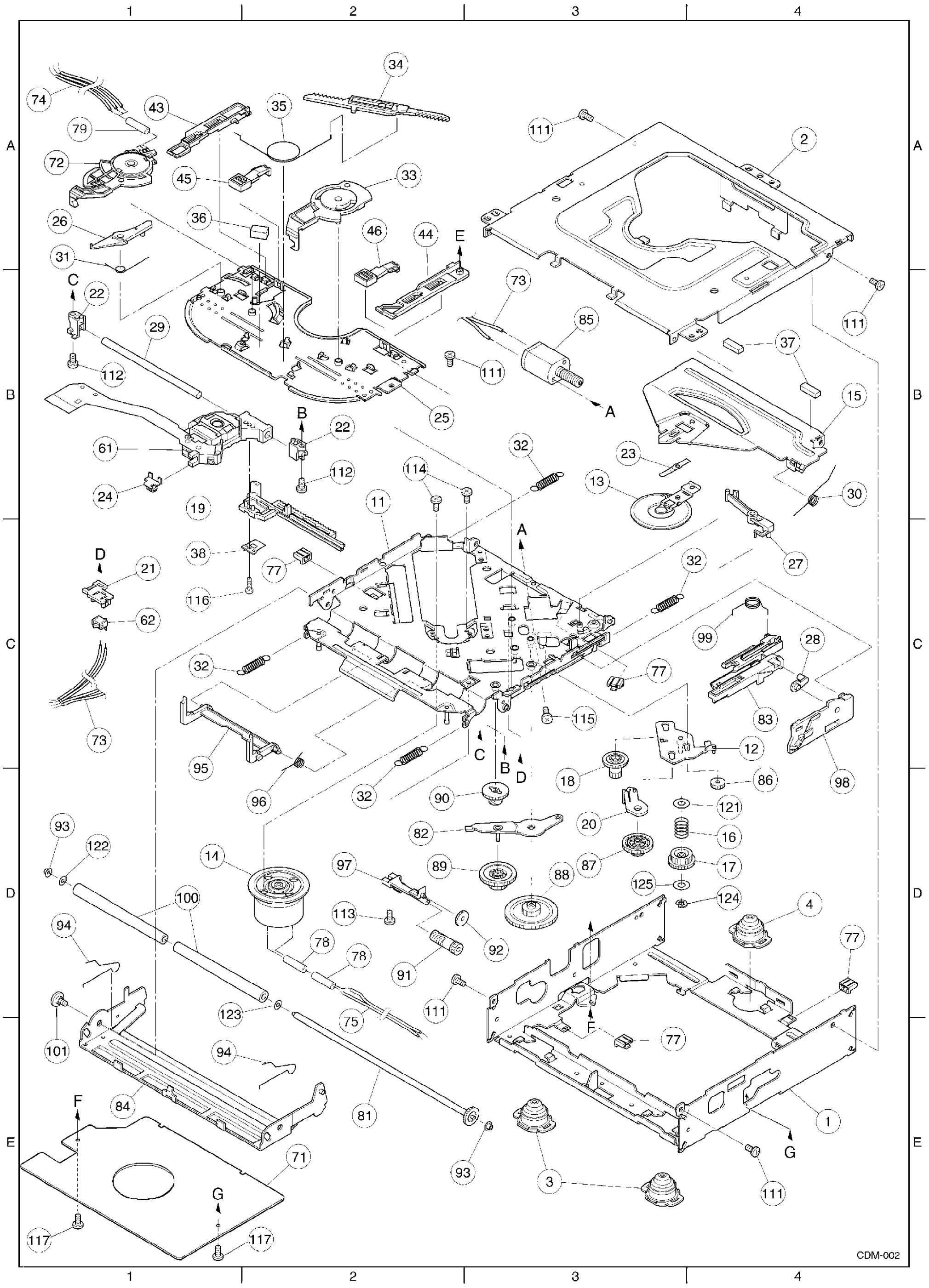
Ref. No.	Part No.	Part Name & Description	Remarks
C25	YESCC186	Chip, 0.022 μ F 50WV	
C26	YESCC183	Chip, 0.0022 μ F 50WV	
C27	YESCC183	Chip, 0.0022 μ F 50WV	
C28	YESCC181	Chip, 27pF 50WV	
C30	YESCC182	Chip, 56pF 50WV	
C31	YESCC181	Chip, 27pF 50WV	
C32	YESCC188	Electrolytic, 10micro;F 16WV	
C34	YESCC195	Chip, 0.1micro;F 50WV	
C35	YESCC188	Electrolytic, 10micro;F 16WV	
C38	YESCC189	Electrolytic, 100micro;F 10WV	
C39	YESCC188	Electrolytic, 10micro;F 16WV	
C40	YESCC189	Electrolytic, 100micro;F 10WV	
C45	YESCC195	Chip, 0.1micro;F 50WV	
C46	YESCC189	Electrolytic, 100micro;F 10WV	
C51	YESCC194	Chip, 0.01micro;F 250WV	
C52	F1H1H103A783	Chip, 0.01 μ F 50WV	
C53	F1H1H103A783	Chip, 0.01 μ F 50WV	
RESISTORs			
J1	ERJ8GEY0R00V	Chip, 0 Ω 1/8W	
J100	ERJ8GEY0R00V	Chip, 0 Ω 1/8W	
J101	ERJ8GEY0R00V	Chip, 0 Ω 1/8W	
J102	ERJ8GEY0R00V	Chip, 0 Ω 1/8W	
J103	ERJ8GEY0R00V	Chip, 0 Ω 1/8W	
J104	ERJ8GEY0R00V	Chip, 0 Ω 1/8W	
J105	ERJ8GEY0R00V	Chip, 0 Ω 1/8W	
J106	ERJ8GEY0R00V	Chip, 0 Ω 1/8W	
J107	ERJ8GEY0R00V	Chip, 0 Ω 1/8W	
J108	ERJ8GEY0R00V	Chip, 0 Ω 1/8W	
J109	ERJ8GEY0R00V	Chip, 0 Ω 1/8W	
J110	ERJ8GEY0R00V	Chip, 0 Ω 1/8W	
J111	ERJ8GEY0R00V	Chip, 0 Ω 1/8W	
J112	ERJ8GEY0R00V	Chip, 0 Ω 1/8W	
J113	ERJ8GEY0R00V	Chip, 0 Ω 1/8W	
J114	ERJ8GEY0R00V	Chip, 0 Ω 1/8W	
J115	ERJ8GEY0R00V	Chip, 0 Ω 1/8W	
J116	ERJ8GEY0R00V	Chip, 0 Ω 1/8W	
J117	ERJ8GEY0R00V	Chip, 0 Ω 1/8W	
J118	ERJ8GEY0R00V	Chip, 0 Ω 1/8W	
J119	ERJ8GEY0R00V	Chip, 0 Ω 1/8W	
J120	ERJ8GEY0R00V	Chip, 0 Ω 1/8W	
J121	ERJ8GEY0R00V	Chip, 0 Ω 1/8W	
J122	ERJ8GEY0R00V	Chip, 0 Ω 1/8W	
J123	ERJ8GEY0R00V	Chip, 0 Ω 1/8W	
J124	ERJ8GEY0R00V	Chip, 0 Ω 1/8W	
J125	ERJ8GEY0R00V	Chip, 0 Ω 1/8W	
J126	ERJ8GEY0R00V	Chip, 0 Ω 1/8W	
J127	ERJ8GEY0R00V	Chip, 0 Ω 1/8W	
J128	ERJ8GEY0R00V	Chip, 0 Ω 1/8W	
J129	ERJ8GEY0R00V	Chip, 0 Ω 1/8W	
J130	ERJ8GEY0R00V	Chip, 0 Ω 1/8W	

Ref. No.	Part No.	Part Name & Description	Remarks
J131	ERJ8GEY0R00V	Chip, 0 Ω 1/8W	
J132	ERJ8GEY0R00V	Chip, 0 Ω 1/8W	
J133	ERJ8GEY0R00V	Chip, 0 Ω 1/8W	
J134	ERJ8GEY0R00V	Chip, 0 Ω 1/8W	
J135	ERJ8GEY0R00V	Chip, 0 Ω 1/8W	
J136	ERJ8GEY0R00V	Chip, 0 Ω 1/8W	
J137	ERJ8GEY0R00V	Chip, 0 Ω 1/8W	
J138	ERJ8GEY0R00V	Chip, 0 Ω 1/8W	
J139	ERJ8GEY0R00V	Chip, 0 Ω 1/8W	
J140	ERJ8GEY0R00V	Chip, 0 Ω 1/8W	
J142	ERJ8GEY0R00V	Chip, 0 Ω 1/8W	
J143	ERJ8GEY0R00V	Chip, 0 Ω 1/8W	
J144	ERJ8GEY0R00V	Chip, 0 Ω 1/8W	
J145	ERJ8GEY0R00V	Chip, 0 Ω 1/8W	
J146	ERJ8GEY0R00V	Chip, 0 Ω 1/8W	
J147	ERJ8GEY0R00V	Chip, 0 Ω 1/8W	
J148	ERJ8GEY0R00V	Chip, 0 Ω 1/8W	
J149	ERJ8GEY0R00V	Chip, 0 Ω 1/8W	
J150	ERJ8GEY0R00V	Chip, 0 Ω 1/8W	
J151	ERJ8GEY0R00V	Chip, 0 Ω 1/8W	
J152	ERJ8GEY0R00V	Chip, 0 Ω 1/8W	
J153	ERJ8GEY0R00V	Chip, 0 Ω 1/8W	
J154	ERJ8GEY0R00V	Chip, 0 Ω 1/8W	
J155	ERJ8GEY0R00V	Chip, 0 Ω 1/8W	
J156	ERJ8GEY0R00V	Chip, 0 Ω 1/8W	
J157	ERJ8GEY0R00V	Chip, 0 Ω 1/8W	
J158	ERJ8GEY0R00V	Chip, 0 Ω 1/8W	
J159	ERJ8GEY0R00V	Chip, 0 Ω 1/8W	
J160	ERJ8GEY0R00V	Chip, 0 Ω 1/8W	
R1	ERJ3GEYJ103V	Chip, 10k Ω 1/16W	
R2	ERJ3GEYJ103V	Chip, 10k Ω 1/16W	
R8	ERJ6GEYJ222	Chip, 2.2k Ω 1/10W	
R10	ERJ3GEYJ392V	Chip, 3.9k Ω 1/16W	
R12	ERJ3GEYJ222V	Chip, 2.2k Ω 1/16W	
R13	ERJ3GEYJ392V	Chip, 3.9k Ω 1/16W	
R14	ERJ3GEYJ103V	Chip, 10k Ω 1/16W	
R20	ERJ3GEYJ473V	Chip, 47k Ω 1/16W	
R21	ERJ3GEYJ221V	Chip, 220 Ω 1/16W	
R22	ERJ3GEYJ221V	Chip, 220 Ω 1/16W	
R27	ERJ3GEYJ393V	Chip, 39k Ω 1/16W	
R28	ERJ6GEYJ104	Chip, 100k Ω 1/10W	
R30	ERJ3GEYJ220V	Chip, 22 Ω 1/16W	
R34	ERJ3GEYJ184V	Chip, 180k Ω 1/16W	
R37	ERJ3GEY0R00V	Chip, 0 Ω 1/16W	
R39	ERJ3GEY0R00V	Chip, 0 Ω 1/16W	
R40	ERJ3GEY0R00V	Chip, 0 Ω 1/16W	
R41	ERJ3GEYJ104V	Chip, 100k Ω 1/16W	
R46	ERJ3GEYJ472V	Chip, 4.7k Ω 1/16W	
R47	ERJ6GEYJ473	Chip, 47k Ω 1/10W	
R48	ERJ3GEYJ473V	Chip, 47k Ω 1/16W	
R51	ERJ3GEYJ102V	Chip, 1k Ω 1/16W	

Ref. No.	Part No.	Part Name & Description	Remarks
R52	ERJ6GEYJ102	Chip, 1k Ω 1/10W	
R53	ERJ3GEYJ102V	Chip, 1k Ω 1/16W	
R54	ERJ3GEYJ102V	Chip, 1k Ω 1/16W	
R55	ERJ3GEYJ102V	Chip, 1k Ω 1/16W	
R56	ERJ3GEYJ101V	Chip, 100 Ω 1/16W	
R57	ERJ3GEYJ102V	Chip, 1k Ω 1/16W	
R58	ERJ3GEYJ102V	Chip, 1k Ω 1/16W	
R59	ERJ3GEYJ102V	Chip, 1k Ω 1/16W	
R60	ERJ3GEYJ102V	Chip, 1k Ω 1/16W	
R61	ERJ6GEYJ102	Chip, 1k Ω 1/10W	
R62	ERJ8GEYJ102V	Chip, 1k Ω 1/8W	
CRYSTAL			
X1	H2C160500001	Ceramic Resonator	
COIL			
L1	YESLQ011	Coil	
CONNECTORs			
CN1	YESAE341	Connector	
CN2	K1MN16B00036	FFC/FPC Connector	
MECHANICAL PARTS			
MISCELLANEOUS			
1	YERFA01001	Frame M	
2	YERFA01002	Top cover M	
3	YERFS04003	Damper F	
4	YERFS04004	Damper R	
11	YERFA01005	Chassis Rivet S Ass'y (M)	
12	YERFX046001	Change Plate Rivet Ass'y (M)	
13	YERFX007001	Clamper Ass'y	
14	YERAK0001	Spindle Motor (M) Ass'y	
15	YERFX046002	Clamper Arm M	
16	YERFX005001	Change Gear Spring	
17	YERFX03001	Change Gear 2	
18	YERFX03002	Feed Gear	
19	YERFX03003	Feed Rack M	
20	YERFX046003	Change Lock Lever M	
21	YERFW04001	Feed SW Holder (,M)	
22	YERFW04002	PU Shaft Holder(,M)	
23	YERFX005002	Clamper Sub Spring	
24	YERFW04003	FD Sub Holder M	
25	YERFA01006	Top Plate S	
26	YERFX046004	Select Lock Arm	
27	YERFX046005	Trigger Arm M	
28	YERFX046006	Slide Hook	
29	YERFW01001	PU Shaft M	
30	YERFX005003	Clamper Arm Spring M	
31	YERFX005004	Select Lock Arm Spring	
32	YERFX005013	Suspension Spring MS	
33	YERFX046007	Select Arm R	

Ref. No.	Part No.	Part Name & Description	Remarks
34	YERFX03004	Link Plate	
35	YERFX005006	Link Plate Spring	
36	YERFS01001	Cushion F	
37	YERFS01002	Cushion R	
38	YERFX005014	Feed SPR Plate M	
43	YERFX046008	Select Plate L	
44	YERFX046009	Select Plate R	
45	YERFX046010	Select Piece L	
46	YERFX046011	Select Piece R	
61	YERFD13001	Pick Up RD-DAP005-TN	
62	YERAS0001	DET SW ESE 22MH55	
71	YESAP254	Servo PCB Ass'y	RTL
72	YERAS0002	Mode SW	
73	YESAJ02015	LD Wire MS	
74	YESAJ02013	SW Wire S	
75	YESAJ02012	SP Wire S	
77	YERFX999001	Wire Clamper M	
78	YESFX024021	Wire Tube SPM	
79	YESFX024022	Wire Tube MSW	
81	YERFX03005	Roller Shaft Ass'y	
82	YERFX046012	Loading Gear Plate Rivet Ass'y	
83	YERFX046013	Loading Plate Ass'y	
84	YERFX046014	Lock Arm Rivet Ass'y	
85	YERAK0002	Loading/Feed Motor Ass'y(MB)	
86	YERFX03006	Loading Gear 1	
87	YERFX03007	Loading Gear 2	
88	YERFX03008	Loading Gear 3	
89	YERFX03009	Loading Gear 4	
90	YERFX03010	Loading Gear 5	
91	YERFX03011	Loading Gear 6	
92	YERFX03012	Loading Gear 7	
93	YERFW04004	Roller Guide	
94	YERFX005007	Roller Guide Spring	
95	YERFX046015	Disc Stopper Arm	
96	YERFX005008	Disc Stop Arm Spring	
97	YERFX046016	LD Gear Bracket	
98	YESFX046133	L Slide Plate	
99	YERFX005009	Loading Plate Spring	
100	YESFX046134	LDG Roller	
101	YERJS01001	PK Collar Screw A	
111	YERJT01001	Tapping Screw 2~3	
112	YERJT01002	Tapping Screw 2~4	
113	YEJT03117	Tapping Bind Screw 2~4	
114	YERJS01002	Camera Screw 1.7~1.8	
115	YERJS01003	Camera Screw 2~2	
116	YERJS01004	Camera Tapping Screw P3 M1.7~5	
117	YESJS01148	Tapping Screw (Metal)2.0~4.0	
121	YERJW01001	PW 3.5~8~0.3	
122	YERJW01002	HLW 1.85~5~0.13	
123	YERJW01003	Lumilar Washer 3.1~6~0.1	
124	YEJE01028	E Ring S 1.5	
125	YERJW01005	PW 2.1~4~0.13	

18. EXPLODED VIEW (CD Deck) [CQ-DFX223N/213N/203N]


1
2
3
4
A
B
C
D
E
34
74
43
35
79
111
2
72
45
33
26
36
46
44
E
31
73
C
22
85
29
111
37
112
111
25
15
A
61
B
22
32
23
112
114
30
24
19
11
13
A
27
D
21
38
77
32
116
99
28
62
77
32
115
83
73
12
95
C
B
D
18
86
98
96
32
90
121
93
82
20
16
122
14
97
89
88
87
17
125
100
124
4
94
113
92
78
78
91
77
111
123
75
F
77
101
94
84
F
81
1
G
71
93
3
111
117
G
117
CDM-002

19. WIRING DIAGRAM

19.1. Main Block (Top View)

19.2. Main Block (Bottom View)

19.3. Display Block

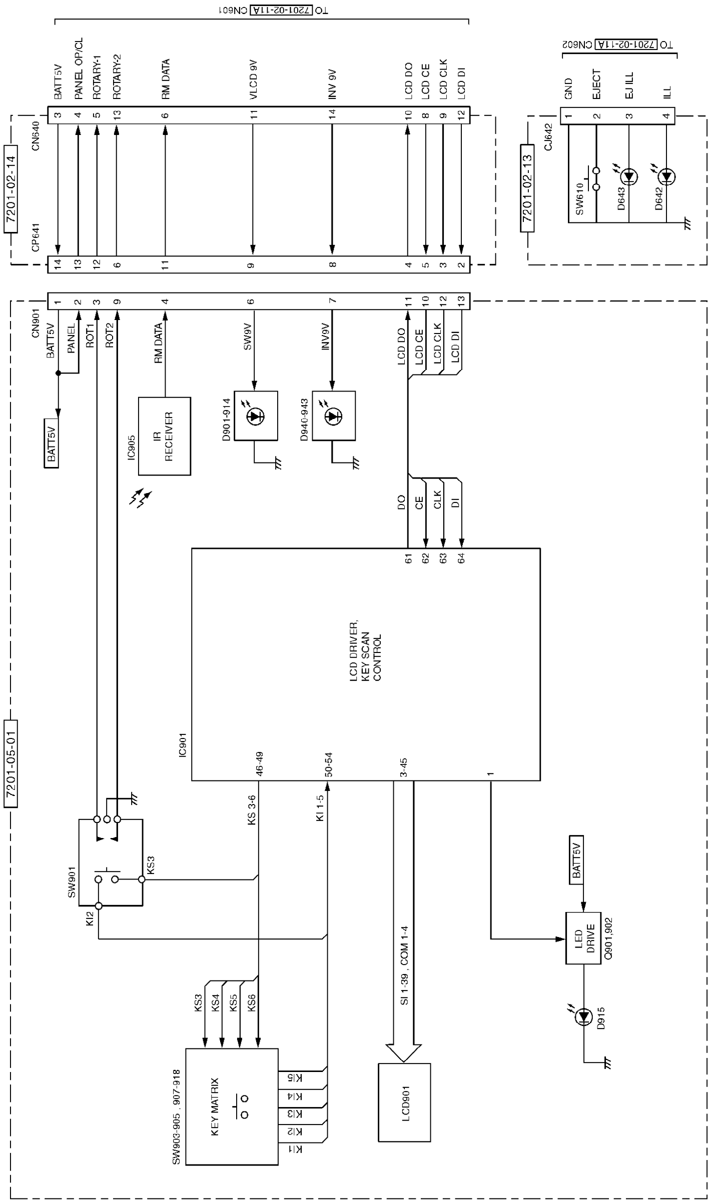
19.4. Eject/ Connector Block

19.5. CD Servo Block [CQ-DFX683N]

19.6. CD Servo Block [CQ-DFX223N/DFX213N/DFX203N]

20. BLOCK DIAGRAM-1

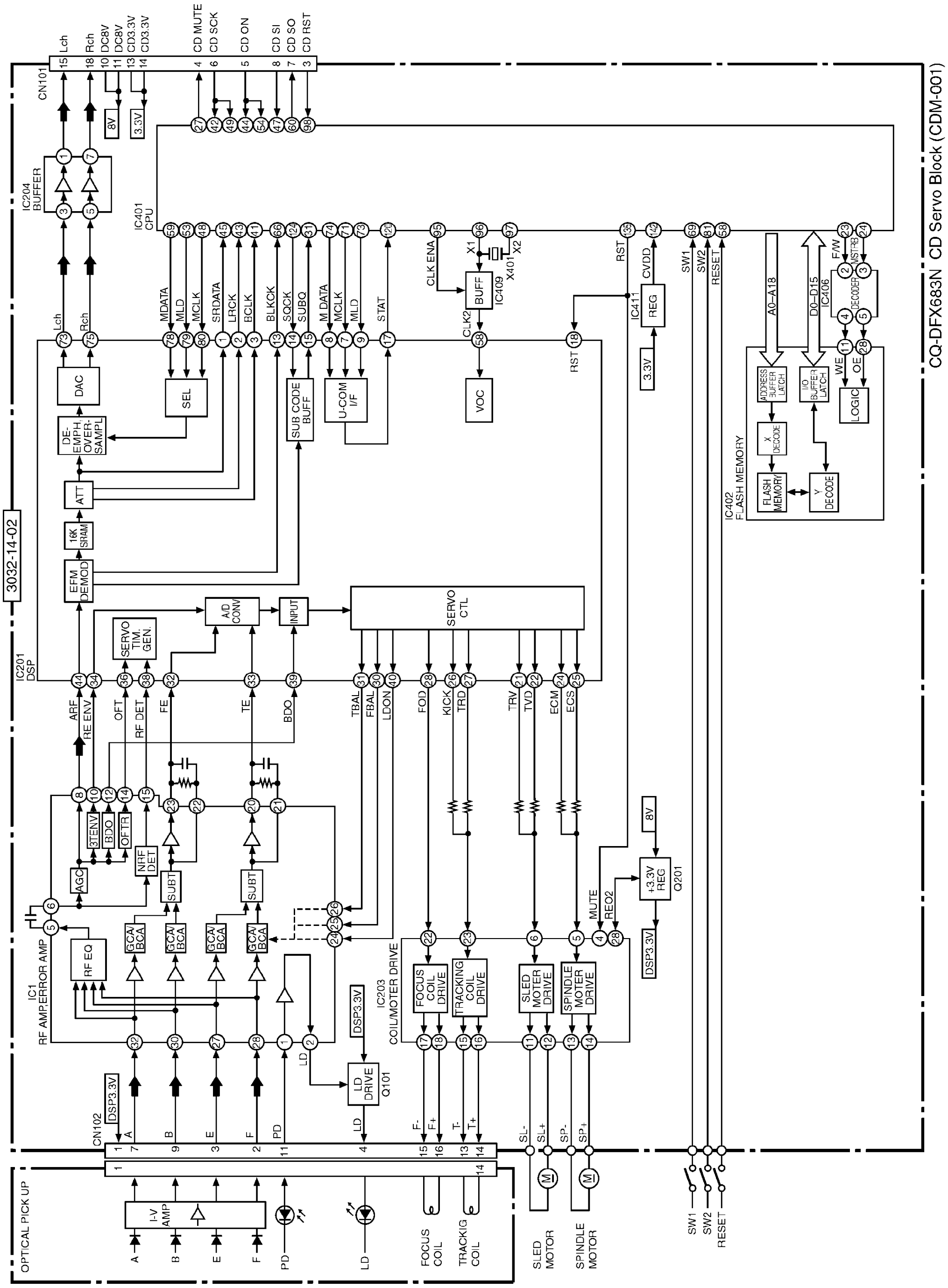
20.1. Display Block [CQ-DFX683N/DFX223N/DFX213N/DFX203N]



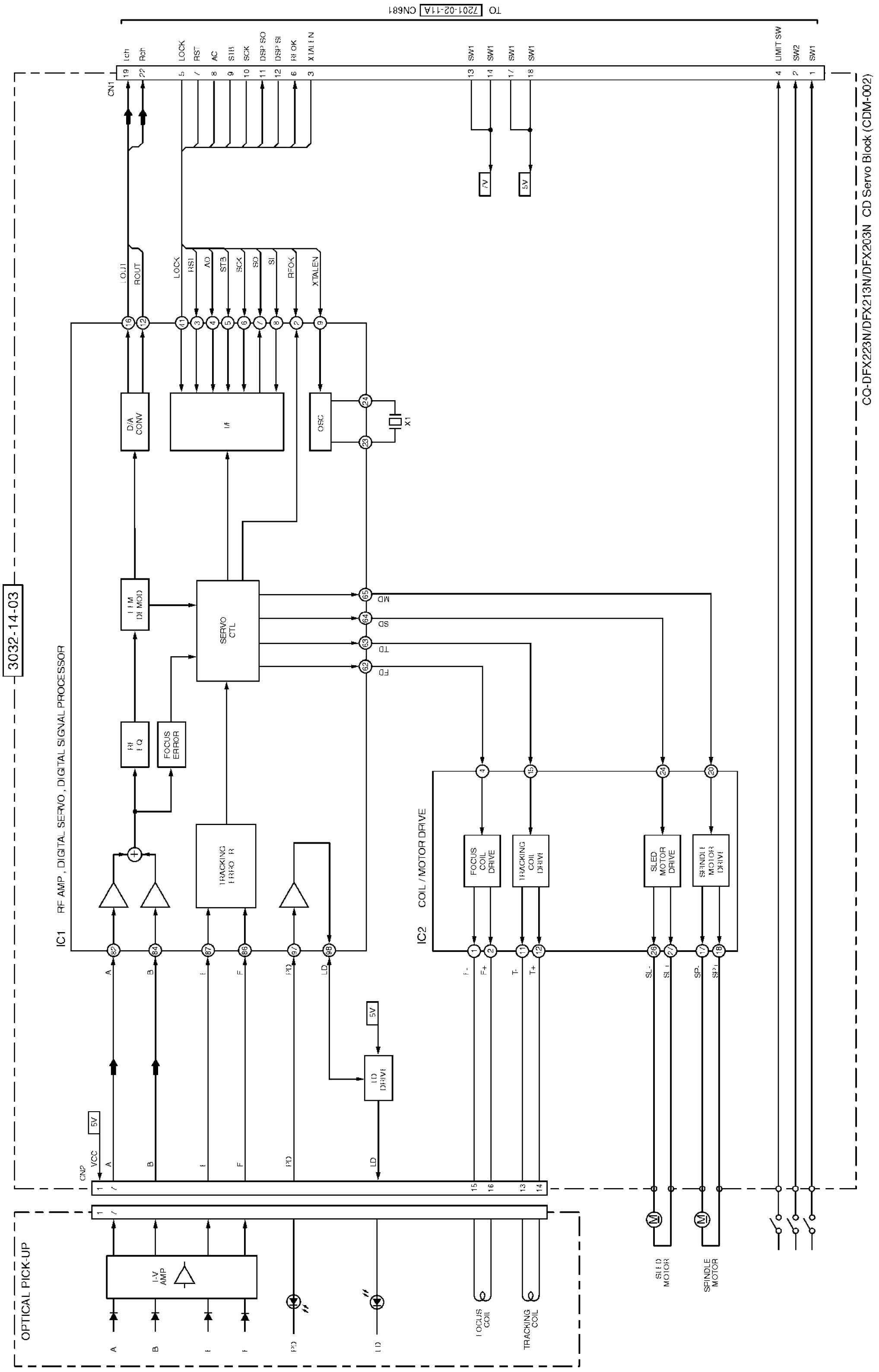
TO 7201-02-11A CN601
TO 7201-02-11A CN602
7201-02-14
CN640
CP641
BATT5V
PANEL OP/CL
ROTARY-1
ROTARY-2
RM DATA
VLCD 9V
INV 9V
LCD DO
LCD CE
LCD CLK
LCD DI
7201-02-13
CJ642
GND
EJECT
EJ ILL
ILL
SW610
D643
D642
7201-05-01
CN901
BATT5V
PANEL
ROT1
ROT2
RM DATA
SW9V
INV9V
LCD DO
LCD CE
LCD CLK
LCD DI
IC905
IR RECEIVER
D901-914
D940-943
DO
CE
CLK
DI
IC901
LCD DRIVER, KEY SCAN CONTROL
46-49
50-54
3-45
1
KS 3-6
KI 1-5
SW901
KS3
KI2
SI 1-39 , COM 1-4
BATT5V
LED DRIVE
Q901,902
D915
KS3
KS4
KS5
KS6
KEY MATRIX
SW903-905 , 907-918
KI1
KI2
KI3
KI4
KI5
LCD901

CQ-DFX683N/DFX223N/DFX213N/DFX203N Display / Connector / Eject Block

20.2. CD Servo Block [CQ-DFX683N]


CQ-DFX683N CD Servo Block (CDM-001)
3032-14-02
CN101
Lch
Rch
DC8V
CD3.3V
CD MUTE
CD SCK
CD ON
CD SI
CD SO
CD RST
8V
3.3V
IC204 BUFFER
IC401 CPU
MDATA
MLD
MCLK
SRDATA
LRCK
BCLK
BLKCK
SQCK
SUBQ
M DATA
STAT
CLK ENA
X1
X2
X401
IC409
BUFF
CLK2
VOC
RST
CVDD
IC411
REG
SW1
SW2
RESET
A0–A18
D0–D15
IC406
F/W
MSTRB
DECODER
WE
OE
LOGIC
ADDRESS BUFFER LATCH
I/O BUFFER LATCH
X DECODE
Y DECODE
FLASH MEMORY
IC402 FLASH MEMORY
DAC
SEL
DE-EMPH. OVER-SAMPL
ATT
16K SRAM
EFM DEMOD
SUB CODE BUFF
U-COM I/F
A/D CONV
INPUT
SERVO CTL
SERVO TIM. GEN
IC201 DSP
ARF
RF ENV
OFT
RF DET
FE
TE
BDO
TBAL
FBAL
LDON
FOD
KICK
TRD
TRV
TVD
ECM
ECS
3TENV
BDO
OFTR
AGC
NRF DET
SUBT
GCA/BCA
RF EQ
IC1 RF AMP/ERROR AMP
DSP3.3V
LD DRIVE
Q101
IC203 COIL/MOTER DRIVE
FOCUS COIL DRIVE
TRACKING COIL DRIVE
SLED MOTER DRIVE
SPINDLE MOTER DRIVE
MUTE
REO2
+3.3V REG
Q201
CN102
A
B
E
F
PD
LD
F-
F+
T-
T+
SL-
SL+
SP-
SP+
OPTICAL PICK UP
I-V AMP
FOCUS COIL
TRACKIG COIL
SLED MOTOR
SPINDLE MOTOR
M

20.3. CD Servo Block [CQ-DFX223N/DFX213N/DFX203N]


TO 7201-02-11A CN681
CQ-DFX223N/DFX213N/DFX203N CD Servo Block (CDM-002)
3032-14-03
CN1
Lch
Rch
LOCK
RST
AC
STB
SCK
DSP SO
DSP SI
RF OK
XTALEN
SW1
SW2
LIMIT SW
5V
OUTL
ROUT
D/A CONV
I/F
OSC
X1
EFM DEMOD
SERVO CTL
RF EQ
FOCUS ERROR
TRACKING ERROR
MD
SD
TD
FD
IC1 RF AMP, DIGITAL SERVO, DIGITAL SIGNAL PROCESSOR
IC2 COIL / MOTOR DRIVE
FOCUS COIL DRIVE
TRACKING COIL DRIVE
SLED MOTOR DRIVE
SPINDLE MOTOR DRIVE
LD DRIVE
CNP
VCC
A
B
E
F
PD
LD
F-
F+
T-
T+
SL-
SL+
SP-
SP+
M
SLED MOTOR
SPINDLE MOTOR
OPTICAL PICK-UP
I-V AMP
FOCUS COIL
TRACKING COIL

21. SCHEMATIC DIAGRAM-2

21.1. Main Block [CQ-DFX683N]

21.2. Main Block [CQ-DFX223N/DFX213N/DFX203N]

21.3. Display Block [CQ-DFX683N]

21.4. Display Block [CQ-DFX223N/DFX213N/DFX203N]

21.5. CD Servo Block-1 [CQ-DFX683N]

21.6. CD Servo Block-2 [CQ-DFX683N]

21.7. CD Servo Block [CQ-DFX223N/DFX223N/DFX213N/DFX203N]

21.8. Eject/ Connector Block [CQ-DFX683N]

21.9. Eject/ Connector Block [CQ-DFX223N/DFX213N/DFX203N]

22. BLOCK DIAGRAM-2

22.1. Main Block [CQ-DFX683N]

22.2. Main Block [CQ-DFX223N/DFX213N/DFX203N]

23. SCHEMATIC DIAGRAM for Printing with Letter Size

23.1. Main Block [CQ-DFX683N] (Left Side)

23.2. Main Block [CQ-DFX683N] (Right Side)

23.3. Main Block [CQ-DFX223N/DFX213N/DFX203N] (Left Side)

23.4. Main Block [CQ-DFX223N/DFX213N/DFX203N] (Right Side)

23.5. Display Block [CQ-DFX683N] (Left Side)

23.6. Display Block [CQ-DFX683N] (Right Side)

23.7. Display Block [CQ-DFX223N/DFX213N/DFX203N] (Left Side)

23.8. Display Block [CQ-DFX223N/DFX213N/DFX203N] (Right Side)

23.9. CD Servo Block-1 [CQ-DFX683N] (Left Side)

23.10. CD Servo Block-1 [CQ-DFX683N] (Right Side)

23.11. CD Servo Block-2 [CQ-DFX683N] (Left Side)

23.12. CD Servo Block-2 [CQ-DFX683N] (Right Side)

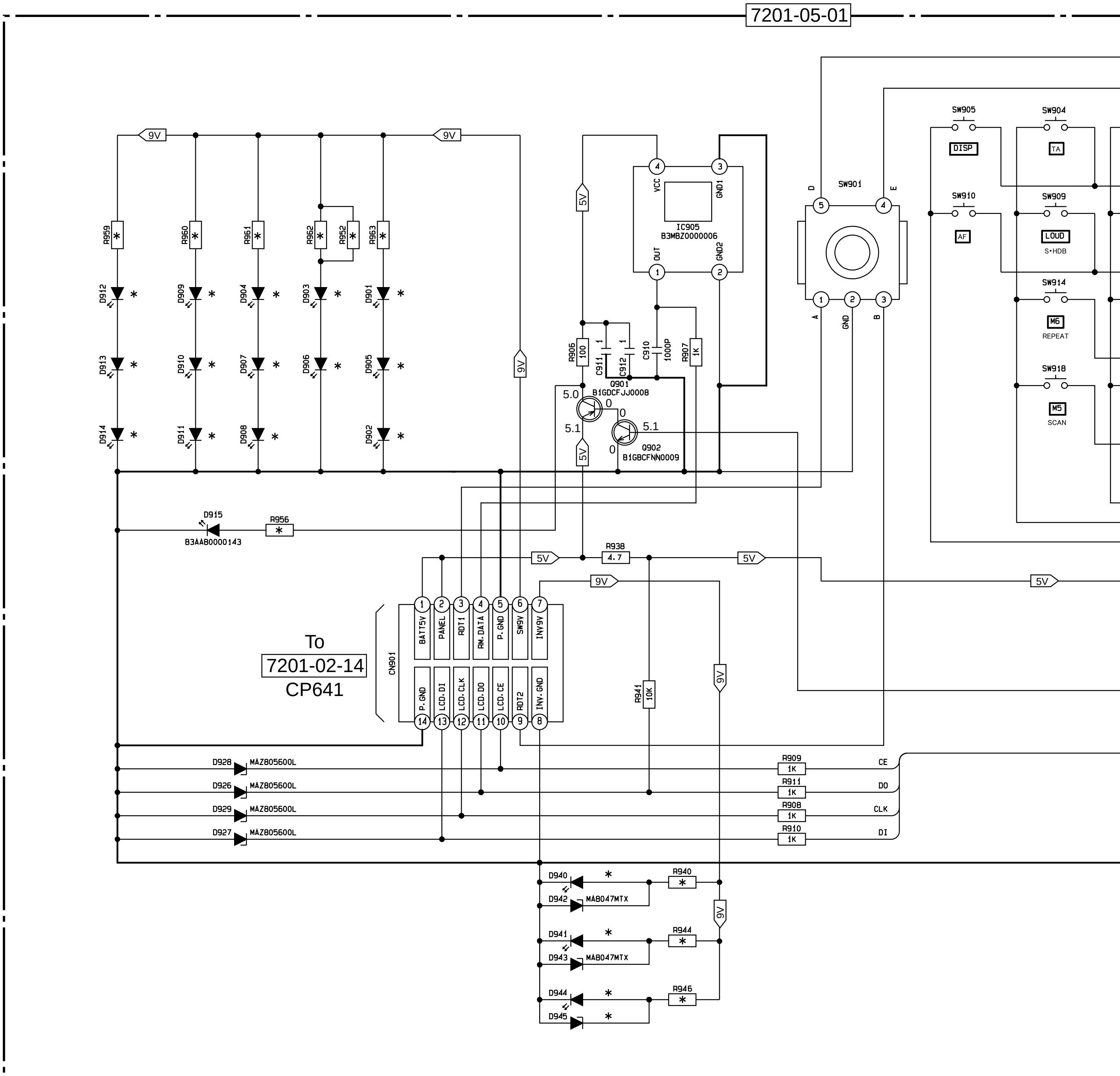
23.13. CD Servo Block [CQ-DFX223N/DFX213N/DFX203N] (Left Side)

23.14. CD Servo Block [CQ-DFX223N/DFX213N/DFX203N] (Right Side)

23.15. Eject/Connector Block [CQ-DFX683N]

23.16. Eject/Connector Block [CQ-DFX223N/DFX213N/DFX203N]

21.4. Display Block [CQ-DFX223N/DFX213N/DFX203N]

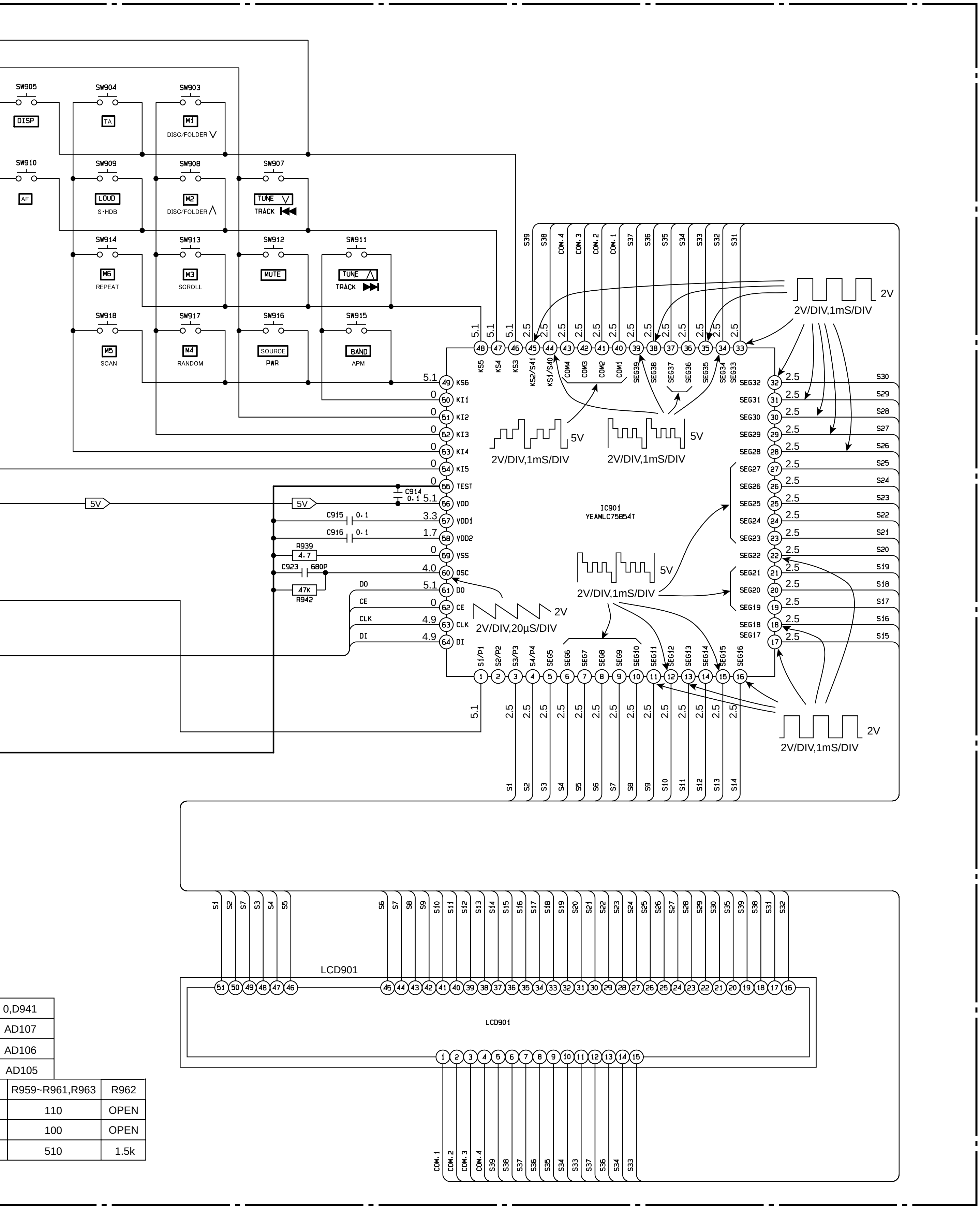

7201-05-01
9V
9V
R959
R960
R961
R962
R952
R963
D912
D909
D904
D903
D901
D913
D910
D907
D906
D905
D914
D911
D908
D902
*
5V
9V
VCC
GND1
IC905
B3MBZ0000006
OUT
GND2
R906 100
C911 1
C912 1
C910 1000P
R907 1K
Q901
B1GDCFJJ0008
5.0
0
0
5.1
5.1
0
Q902
B1GBCFNN0009
SW901
D
E
A
GND
B
SW905
DISP
SW904
TA
SW910
AF
SW909
LOUD
S•HDB
SW914
M6
REPEAT
SW918
M5
SCAN
D915
B3AAB0000143
R956
R938
4.7
5V
5V
5V
9V
To
7201-02-14
CP641
CN901
BATT5V
PANEL
RDT1
RM.DATA
P.GND
SW9V
INV9V
P.GND
LCD.DI
LCD.CLK
LCD.DO
LCD.CE
RDT2
INV.GND
R941 10K
D928
D926
D929
D927
MAZ8056000L
R909 1K
R911 1K
R908 1K
R910 1K
CE
DO
CLK
DI
D940
D942
MA8047MTX
R940
D941
D943
R944
D944
D945
R946

∗	D901,D902,D904,D905,D907~D914	D903,D906	D940,D941
CQ-DFX203N	YESAD110	YESAD109	YESAD107
CQ-DFX213N	YESAD108	YESAD108	YESAD106
CQ-DFX223N	B3AAB0000143	B3AAB0000143	YESAD105

∗	D944	D945	R940,R944	R946	R952	R956	R959~R961,R963	R962
CQ-DFX203N	OPEN	OPEN	330	OPEN	270	330	110	OPEN
CQ-DFX213N	OPEN	OPEN	470	OPEN	200	820	100	OPEN
CQ-DFX223N	YESAD105	MA8047MTX	470	470	OPEN	820	510	1.5k

The following symbols are shown on the schematic diagram.

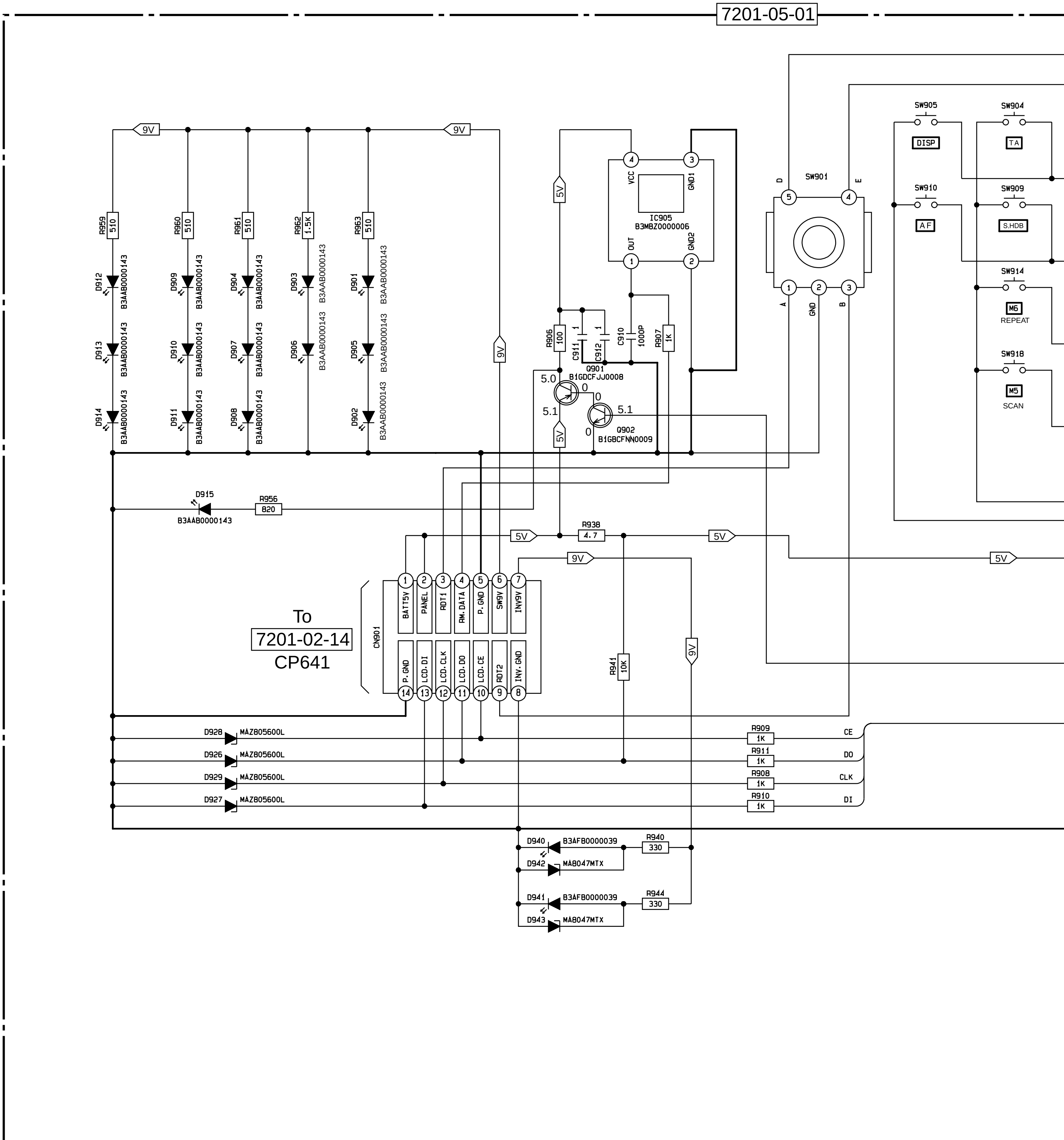
9V	9V
5V	5V


SW905
DISP
SW904
TA
SW903
M1
DISC/FOLDER ⋁
SW910
AF
SW909
LOUD
S•HDB
SW908
M2
DISC/FOLDER ⋀
SW907
TUNE ⋁
TRACK
SW914
M6
REPEAT
SW913
M3
SCROLL
SW912
MUTE
SW911
TUNE ⋀
TRACK
SW918
M5
SCAN
SW917
M4
RANDOM
SW916
SOURCE
PWR
SW915
BAND
APM
5V
5V
C914
0.1
C915
0.1
C916
0.1
R939
4.7
C923
680P
47K
R942
DO
CE
CLK
DI
IC901
YEAMLC75854T
KS6
KI1
KI2
KI3
KI4
KI5
TEST
VDD
VDD1
VDD2
VSS
OSC
DO
CE
CLK
DI
KS5
KS4
KS3
KS2/S41
KS1/S40
COM4
COM3
COM2
COM1
SEG39
SEG38
SEG37
SEG36
SEG35
SEG34
SEG33
SEG32
SEG31
SEG30
SEG29
SEG28
SEG27
SEG26
SEG25
SEG24
SEG23
SEG22
SEG21
SEG20
SEG19
SEG18
SEG17
S1/P1
S2/P2
S3/P3
S4/P4
SEG5
SEG6
SEG7
SEG8
SEG9
SEG10
SEG11
SEG12
SEG13
SEG14
SEG15
SEG16
S39
S38
COM.4
COM.3
COM.2
COM.1
S37
S36
S35
S34
S33
S32
S31
S30
S29
S28
S27
S26
S25
S24
S23
S22
S21
S20
S19
S18
S17
S16
S15
S1
S2
S3
S4
S5
S6
S7
S8
S9
S10
S11
S12
S13
S14
5.1
0
3.3
1.7
4.0
4.9
2.5
2V
2V/DIV,1mS/DIV
5V
2V/DIV,1mS/DIV
5V
2V/DIV,1mS/DIV
5V
2V/DIV,1mS/DIV
2V
2V/DIV,20µS/DIV
2V
2V/DIV,1mS/DIV
LCD901
LCD901
COM.1
COM.2
COM.3
COM.4

0,D941	
AD107	
AD106	
AD105	
R959~R961,R963	R962
110	OPEN
100	OPEN
510	1.5k

CQ-DFX203N/DFX213N/DFX223N DISPLAY BLOCK

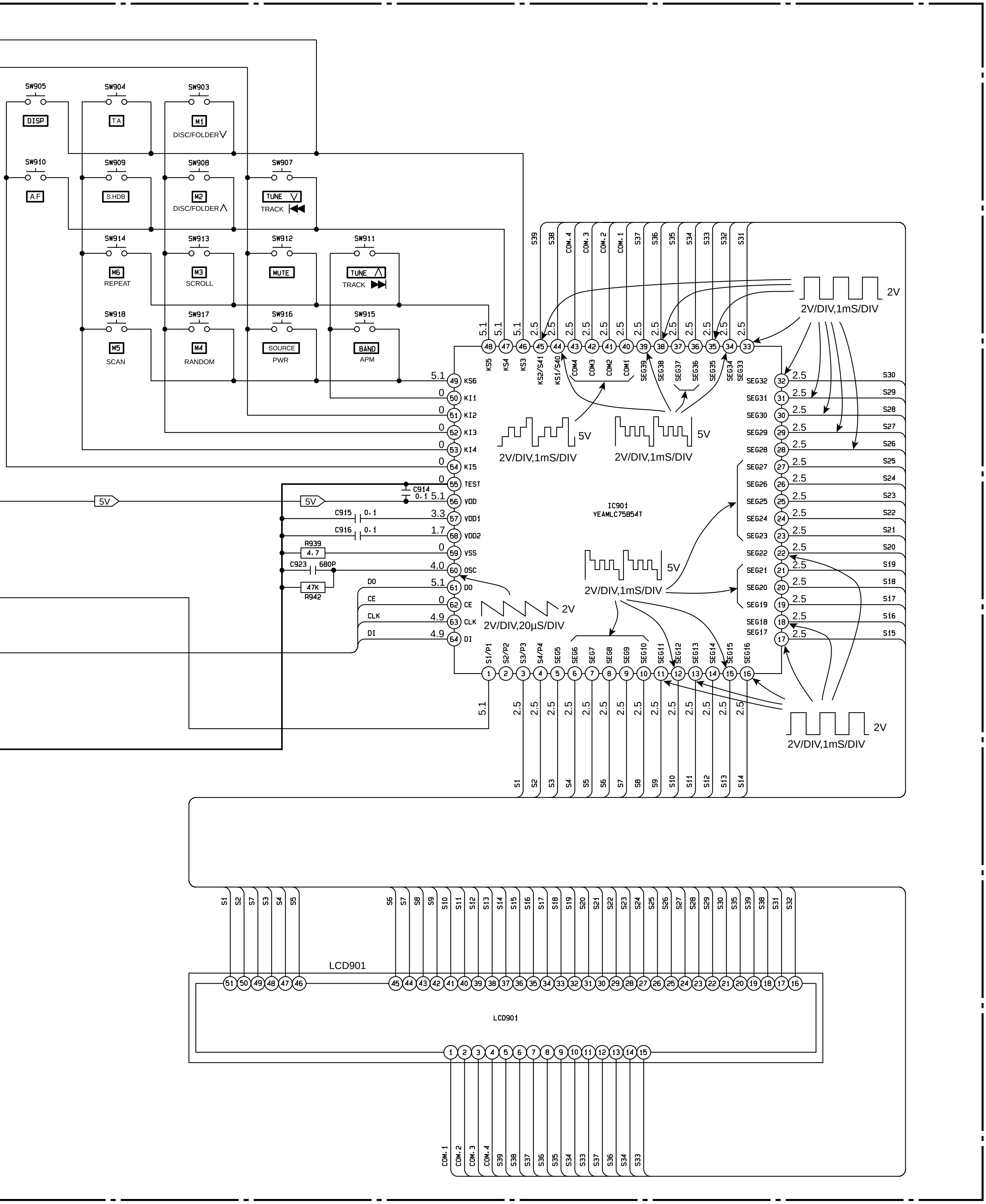
21.3. Display Block [CQ-DFX683N]



7201-05-01
9V
9V
R959 510
R960 510
R961 510
R962 1.5K
R963 510
D912 B3AAB0000143
D913 B3AAB0000143
D914 B3AAB0000143
D909 B3AAB0000143
D910 B3AAB0000143
D911 B3AAB0000143
D904 B3AAB0000143
D907 B3AAB0000143
D908 B3AAB0000143
D903 B3AAB0000143
D906 B3AAB0000143
D901 B3AAB0000143
D905 B3AAB0000143
D902 B3AAB0000143
5V
9V
IC905 B3MBZ0000006
VCC
GND1
OUT
GND2
R906 100
C911 1
C912 1
C910 1000P
R907 1K
Q901 B1GDCFJJ0008
Q902 B1GBCFNN0009
5.0
0
0
5.1
5.1
0
5V
SW901
D
E
A
GND
B
SW905 DISP
SW904 TA
SW910 AF
SW909 S.HDB
SW914 M6 REPEAT
SW918 M5 SCAN
D915 B3AAB0000143
R956 820
R938 4.7
5V
5V
9V
5V
To
7201-02-14
CP641
CN901
1 BATT5V
2 PANEL
3 RDT1
4 RM.DATA
5 P.GND
6 SW9V
7 INV9V
14 P.GND
13 LCD.DI
12 LCD.CLK
11 LCD.DO
10 LCD.CE
9 RDT2
8 INV.GND
R941 10K
9V
D928 MA2805600L
D926 MA2805600L
D929 MA2805600L
D927 MA2805600L
R909 1K
R911 1K
R908 1K
R910 1K
CE
DO
CLK
DI
D940 B3AFB0000039
D942 MA8047MTX
R940 330
D941 B3AFB0000039
D943 MA8047MTX
R944 330

The following symbols are
shown on the schematic diagram.

9V	9V
5V	5V


SW905
DISP
SW904
TA
SW903
M1
DISC/FOLDER∨
SW910
AF
SW909
S.HDB
SW908
M2
DISC/FOLDER∧
SW907
TUNE ∨
TRACK
SW914
M6
REPEAT
SW913
M3
SCROLL
SW912
MUTE
SW911
TUNE ∧
TRACK
SW918
M5
SCAN
SW917
M4
RANDOM
SW916
SOURCE
PWR
SW915
BAND
APM
IC901
YEAMLC75854T
KS6
KI1
KI2
KI3
KI4
KI5
TEST
VDD
VDD1
VDD2
VSS
OSC
DO
CE
CLK
DI
KS5
KS4
KS3
KS2/S41
KS1/S40
COM4
COM3
COM2
COM1
SEG39
SEG38
SEG37
SEG36
SEG35
SEG34
SEG33
SEG32
SEG31
SEG30
SEG29
SEG28
SEG27
SEG26
SEG25
SEG24
SEG23
SEG22
SEG21
SEG20
SEG19
SEG18
SEG17
S1/P1
S2/P2
S3/P3
S4/P4
SEG5
SEG6
SEG7
SEG8
SEG9
SEG10
SEG11
SEG12
SEG13
SEG14
SEG15
SEG16
C914
0.1
C915
0.1
C916
0.1
R939
4.7
C923
680P
47K
R942
5V
5V
2V
2V/DIV,1mS/DIV
5V
2V/DIV,1mS/DIV
5V
2V/DIV,1mS/DIV
5V
2V/DIV,1mS/DIV
2V
2V/DIV,20µS/DIV
2V
2V/DIV,1mS/DIV
LCD901
LCD901
S39
S38
COM.4
COM.3
COM.2
COM.1
S37
S36
S35
S34
S33
S32
S31
S30
S29
S28
S27
S26
S25
S24
S23
S22
S21
S20
S19
S18
S17
S16
S15
S1
S2
S3
S4
S5
S6
S7
S8
S9
S10
S11
S12
S13
S14

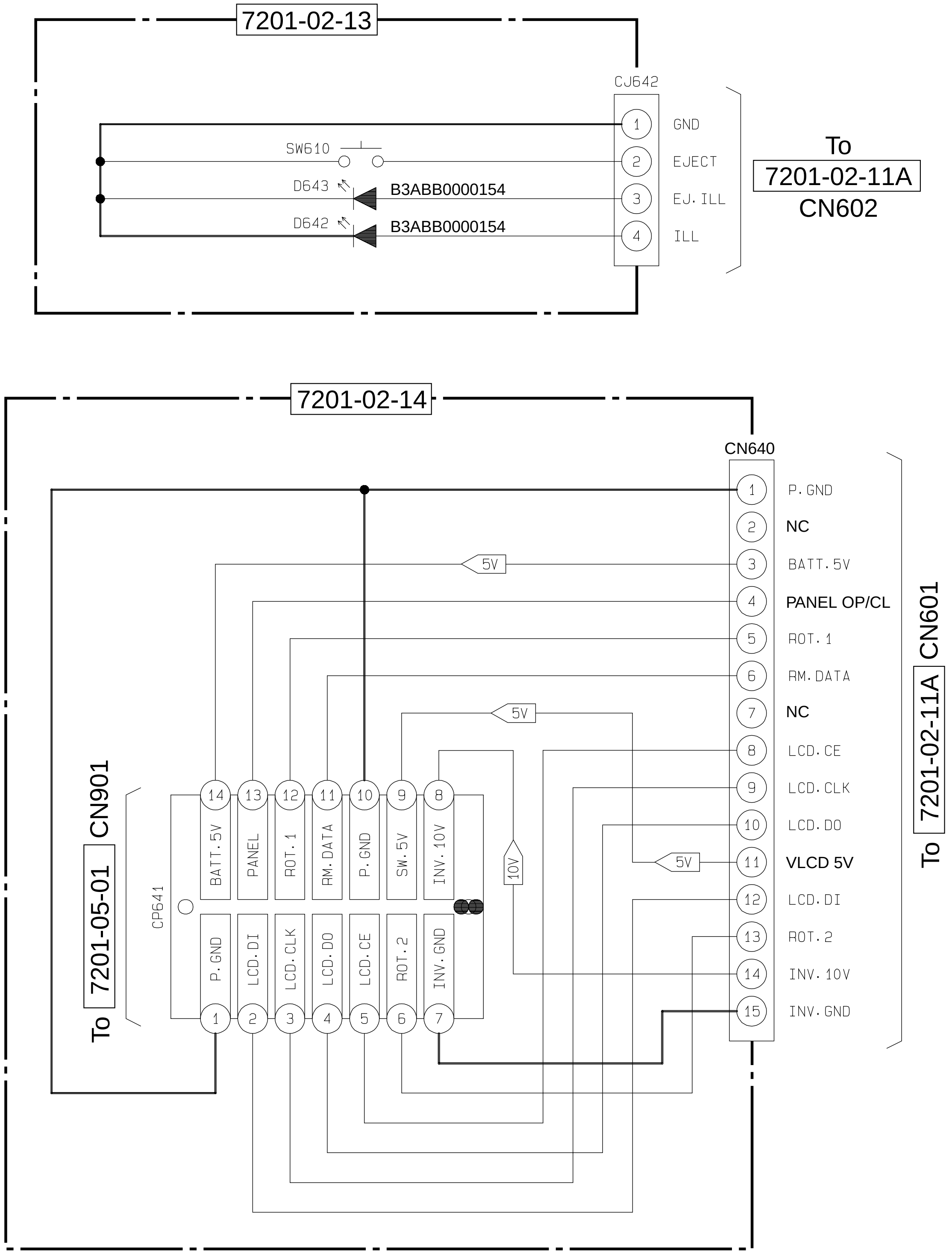
CQ-DFX683N DISPLAY BLOCK

21.8. Eject/ Connector Block [CQ-DFX683N]

21.9.

The following symbols are shown on the schematic diagram.

10V	10V
5V	5V

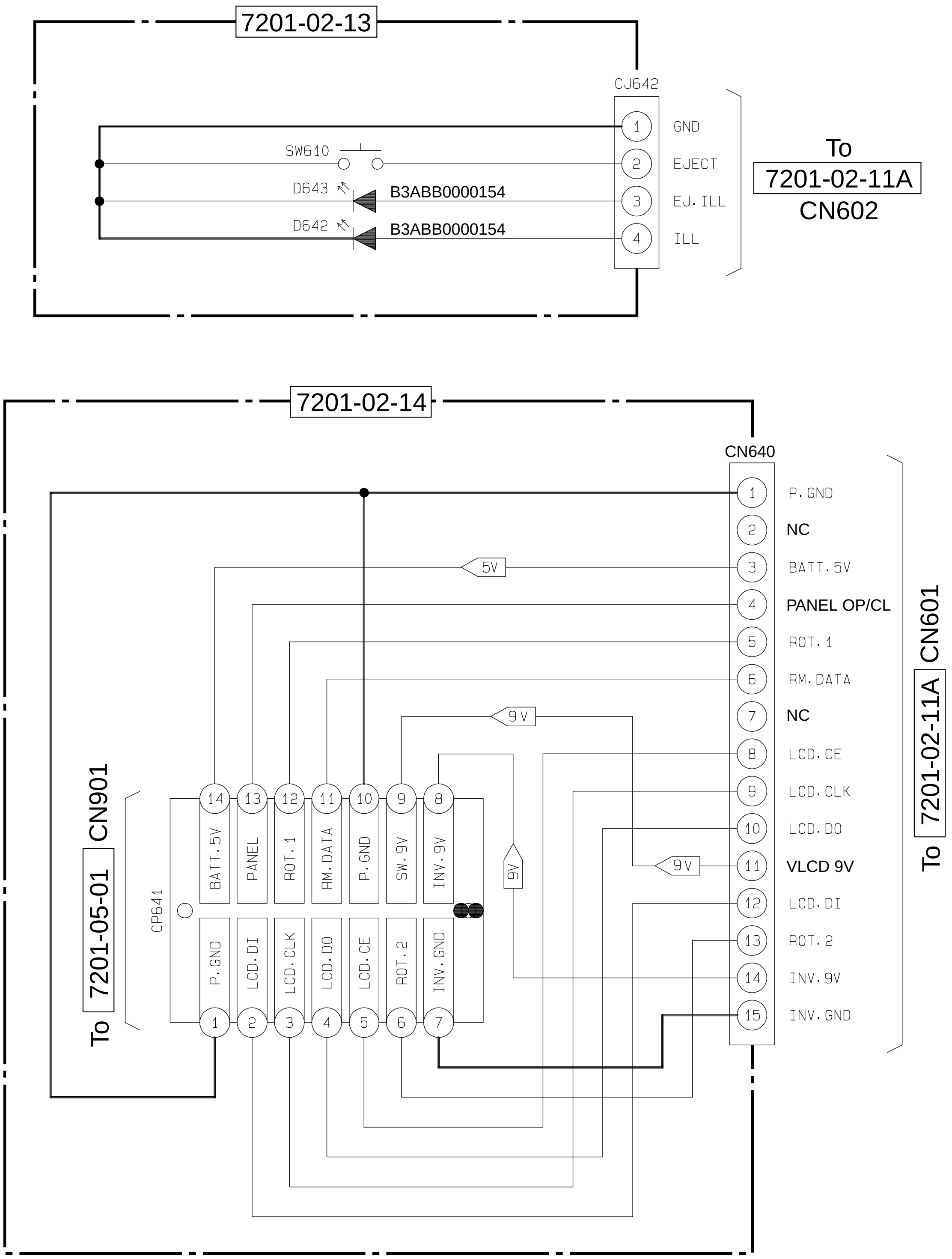

7201-02-13
CJ642
SW610
D643
D642
B3ABB0000154
B3ABB0000154
1 GND
2 EJECT
3 EJ. ILL
4 ILL
To 7201-02-11A CN602
7201-02-14
CN640
1 P. GND
2 NC
3 BATT. 5V
4 PANEL OP/CL
5 ROT. 1
6 RM. DATA
7 NC
8 LCD. CE
9 LCD. CLK
10 LCD. DO
11 VLCD 5V
12 LCD. DI
13 ROT. 2
14 INV. 10V
15 INV. GND
To 7201-02-11A CN601
5V
5V
5V
10V
CP641
14 BATT. 5V
13 PANEL
12 ROT. 1
11 RM. DATA
10 P. GND
9 SW. 5V
8 INV. 10V
1 P. GND
2 LCD. DI
3 LCD. CLK
4 LCD. DO
5 LCD. CE
6 ROT. 2
7 INV. GND
To 7201-05-01 CN901

CQ-DFX683N EJ/CON BLOCK

21.9. Eject/ Connector Block [CQ-DFX223N/DFX213N/DFX203N]

The following symbols are
shown on the schematic diagram.

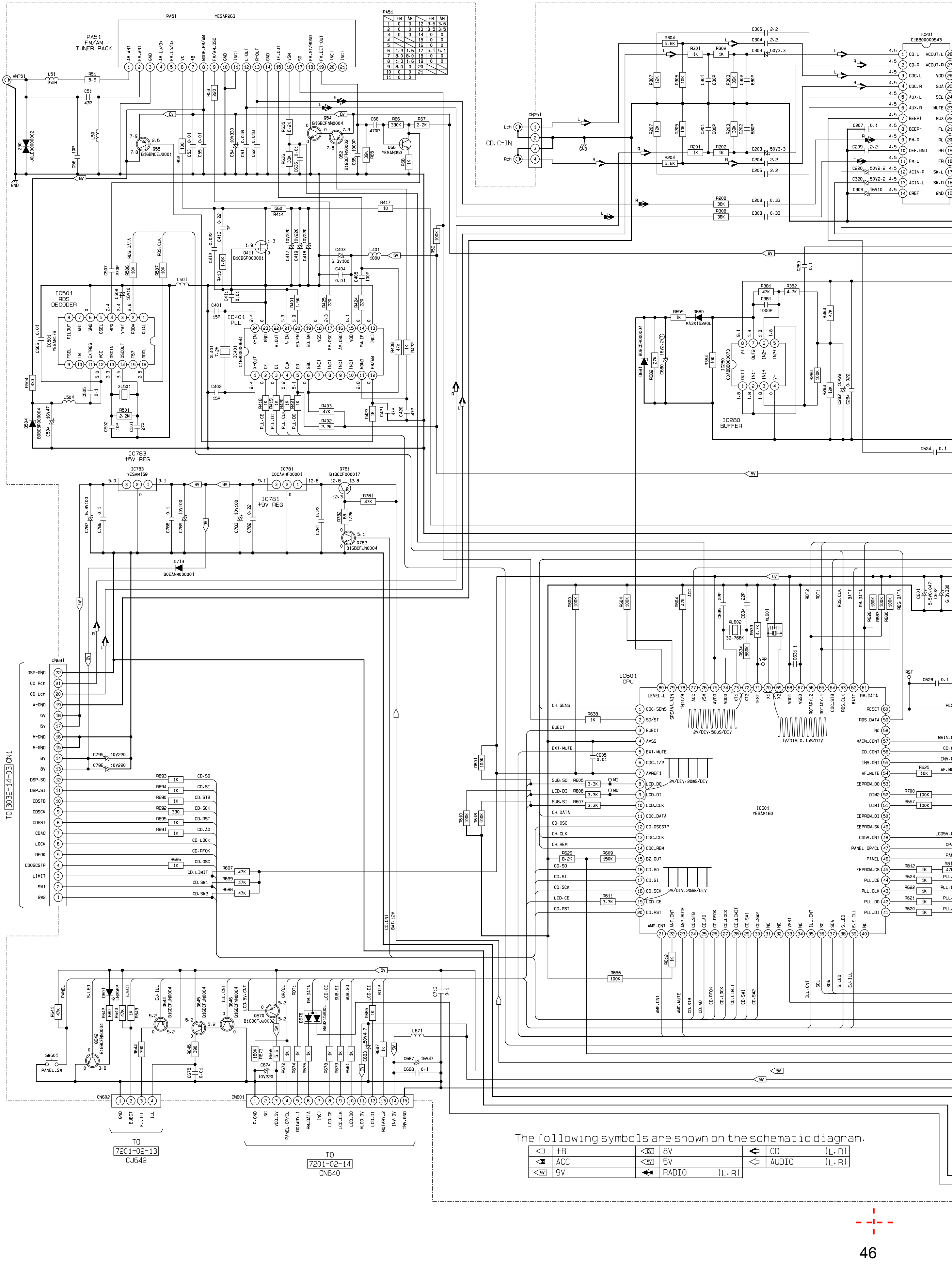
9V	9V
5V	5V



7201-02-13
CJ642
1
2
3
4
GND
EJECT
EJ. ILL
ILL
SW610
D643
D642
B3ABB0000154
B3ABB0000154
To
7201-02-11A
CN602
7201-02-14
CN640
1 P. GND
2 NC
3 BATT. 5V
4 PANEL OP/CL
5 ROT. 1
6 RM. DATA
7 NC
8 LCD. CE
9 LCD. CLK
10 LCD. DO
11 VLCD 9V
12 LCD. DI
13 ROT. 2
14 INV. 9V
15 INV. GND
5V
9V
9V
9V
To 7201-02-11A CN601
To 7201-05-01 CN901
CP641
14 BATT. 5V
13 PANEL
12 ROT. 1
11 RM. DATA
10 P. GND
9 SW. 9V
8 INV. 9V
1 P. GND
2 LCD. DI
3 LCD. CLK
4 LCD. DO
5 LCD. CE
6 ROT. 2
7 INV. GND

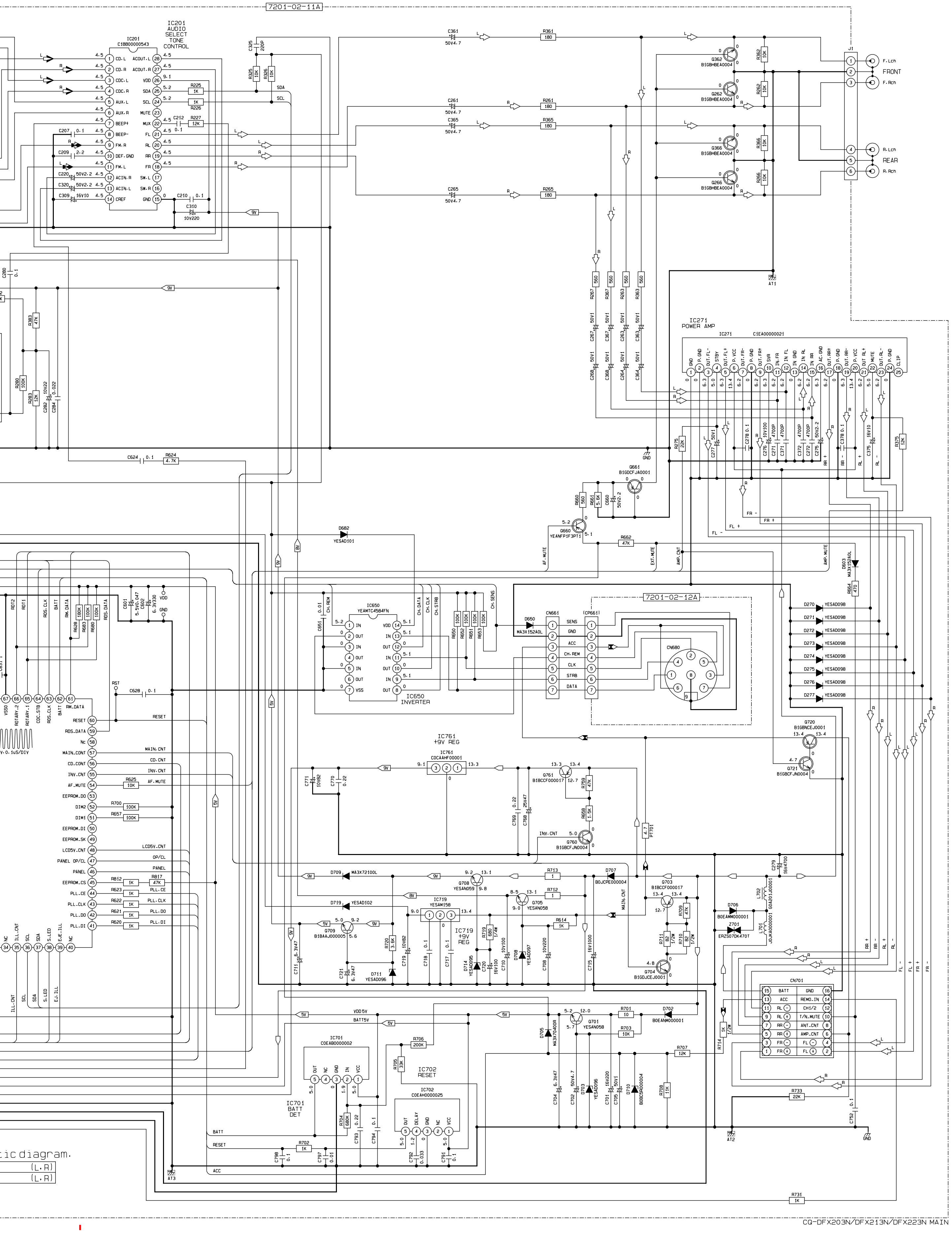
CQ-DFX203N/DFX213N/DFX223N EJ/CON BLOCK

21.2. Main Block [CQ-DFX223N/DFX213N/DFX203N]


PA51 FM/AM TUNER PACK
PA51 YESAP263
ANT51
IC501 RDS DECODER
IC501 YESAM179
IC401 PLL
IC401 C1BB00000644
IC783 +5V REG
IC783 YESAM159
IC781 +9V REG
IC781 C0CAAHF00001
Q781 B1BCCF000017
Q782 B1GDCFJN0004
D713 B0EANM000001
CN251
CD.C-IN
Lch
Rch
IC201 C1BB00000543
IC280 BUFFER
IC280 C0ABB0000073
IC601 CPU
IC601 YESAM180
CN681
TO 3032-14-03 CN1
CN602
TO 7201-02-13 CJ642
CN601
TO 7201-02-14 CN640
SW601 PANEL.SW
2V/DIV・50uS/DIV
1V/DIV・0.1uS/DIV
2V/DIV・20mS/DIV

The following symbols are shown on the schematic diagram.

◁	+B	8V	8V	◀	CD (L.R)
◀	ACC	5V	5V	◁	AUDIO (L.R)
9V	9V	◀	RADIO (L.R)		

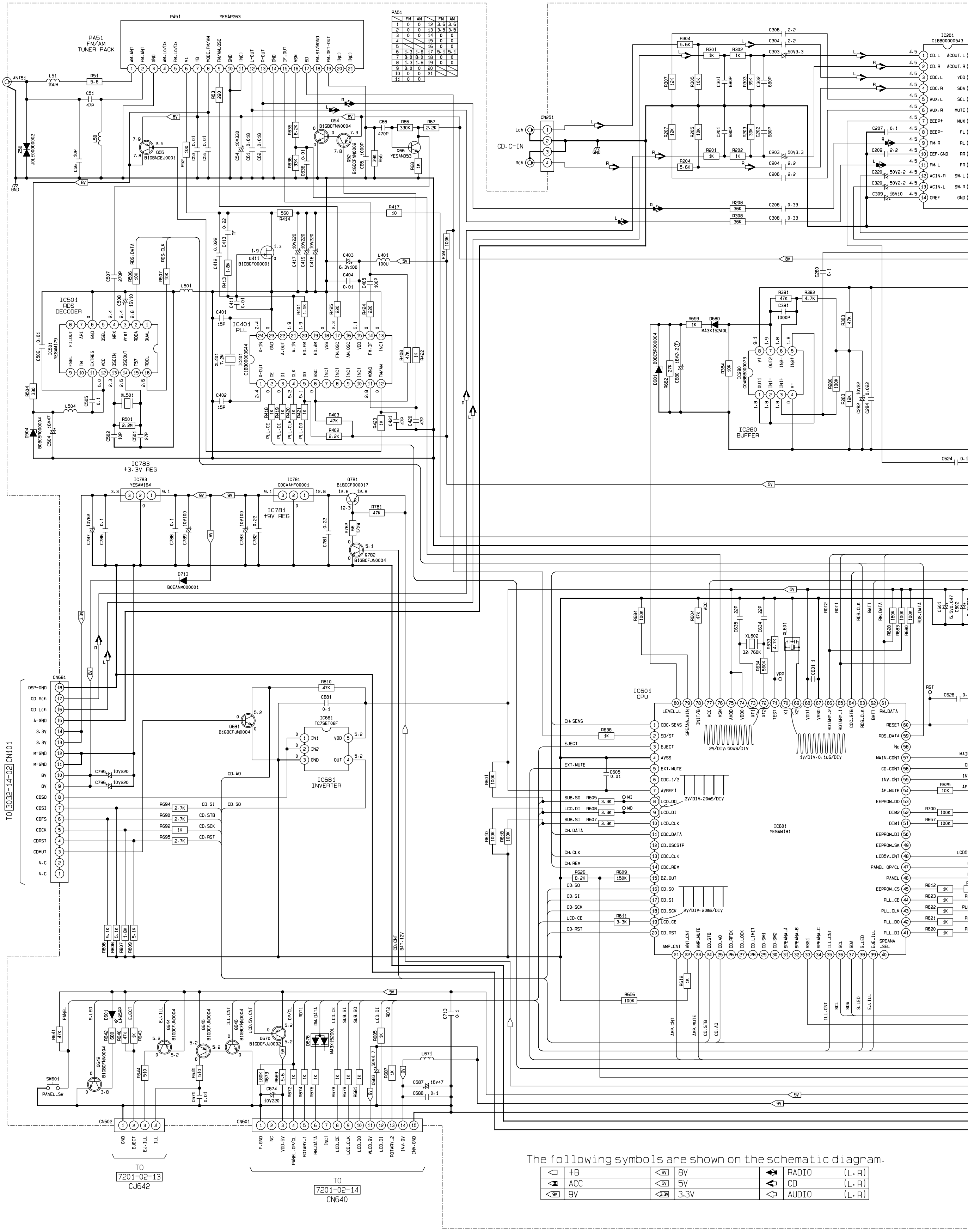


7201-02-11A
IC201
AUDIO
SELECT
TONE
CONTROL
C1BB00000543
CD.L
CD.R
CDC.L
CDC.R
AUX.L
AUX.R
BEEP+
BEEP-
FM.R
DEF.GND
FM.L
ACIN.R
ACIN.L
CREF
ACOUT.L
ACOUT.R
VDD
SDA
SCL
MUTE
MUX
FL
RL
RR
FR
SW.L
SW.R
GND
SDA
SCL
C361 50V4.7
R361 180
C261 50V4.7
R261 180
C365 50V4.7
R365 180
C265 50V4.7
R265 180
Q362 B1GBHBEA0004
Q262 B1GBHBEA0004
Q366 B1GBHBEA0004
Q266 B1GBHBEA0004
J1
F.Lch
FRONT
F.Rch
R.Lch
REAR
R.Rch
AT1
IC271
POWER AMP
C1EA00000021
GND
P.GND
OUT.FL-
STBY
OUT.FL+
P.VCC
OUT.FR-
P.GND
OUT.FR+
SVR
IN FR
IN FL
IN RL
IN RR
AC.GND
OUT.RR+
P.GND
OUT.RR-
P.VCC
OUT RL+
MUTE
OUT.RL-
P.GND
CLIP
Q661 B1GDCFJA0001
Q660 YEANFP1F3PT1
R662 47K
AF.MUTE
EXT.MUTE
AMP.CNT
AMP.MUTE
D682 YESAD101
D603 MA3X152A0L
R664 470
C624 0.1
R624 4.7K
IC650
YEAMTC4584FN
IC650
INVERTER
CH.REM
CH.DATA
CH.CLK
CH.STRB
CH.SENS
D650 MA3X152A0L
CN661
ICP661
SENS
GND
ACC
CH.REM
CLK
STRB
DATA
7201-02-12A
CN680
D270 YESAD098
D271 YESAD098
D272 YESAD098
D273 YESAD098
D274 YESAD098
D275 YESAD098
D276 YESAD098
D277 YESAD098
Q720 B1GBNCEJ0001
Q721 B1GBCFJN0004
RST
RESET
RDS_DATA
NC
MAIN.CNT
CD.CNT
INV.CNT
AF.MUTE
EEPROM.DO
DIM2
DIM1
EEPROM.DI
EEPROM.SK
LCD5V.CNT
PANEL OP/CL
PANEL
EEPROM.CS
PLL.CE
PLL.CLK
PLL.DO
PLL.DI
VSS0
ROTARY.2
ROTARY.1
CDC.STB
RDS.CLK
BATT
RM.DATA
ILL.CNT
SCL
SDA
S.LED
EJE.ILL
NC
V:0.1uS/DIV
IC761
+9V REG
C0CAAHF00001
Q761 B1BCCF000017
Q760 B1GBCFJN0004
INV.CNT
D709 MA3X72100L
Q708 YESAN059
D707 B0JCPE000004
Q703 B1BCCF000017
D719 YESAD102
Q705 YESAN058
IC719
YESAM158
IC719
+9V
REG
Q709 B1BAAJ000005
D711 YESAD096
D714 YESAD095
D708 YESAD097
MAIN.CNT
D706 B0EAMM000001
Z701 ERZS07DK470T
L702 G0A201J00001
L701 J0JKA0000001
Q704 B1GDJCEJ0001
CN701
BATT
ACC
RL
RR
FR
GND
REMO.IN
CH1/2
T/N.MUTE
ANT.CNT
AMP.CNT
FL
VDD5V
BATT5V
IC701
C0EAB0000002
IC701
BATT
DET
R706 200K
R705 33K
IC702
RESET
IC702
C0EAH0000025
OUT
DELAY
GND
NC
VCC
Q701 YESAN058
D702 B0EANM000001
D705 MA3X704000R
D710 B0BC5R600004
R714 1K
R707 12K
R733 22K
R731 1K
AT2
AT3
GND
BATT
RESET
ACC
tic diagram.
(L.A)
(L.A)

CQ-DFX203N/DFX213N/DFX223N MAIN

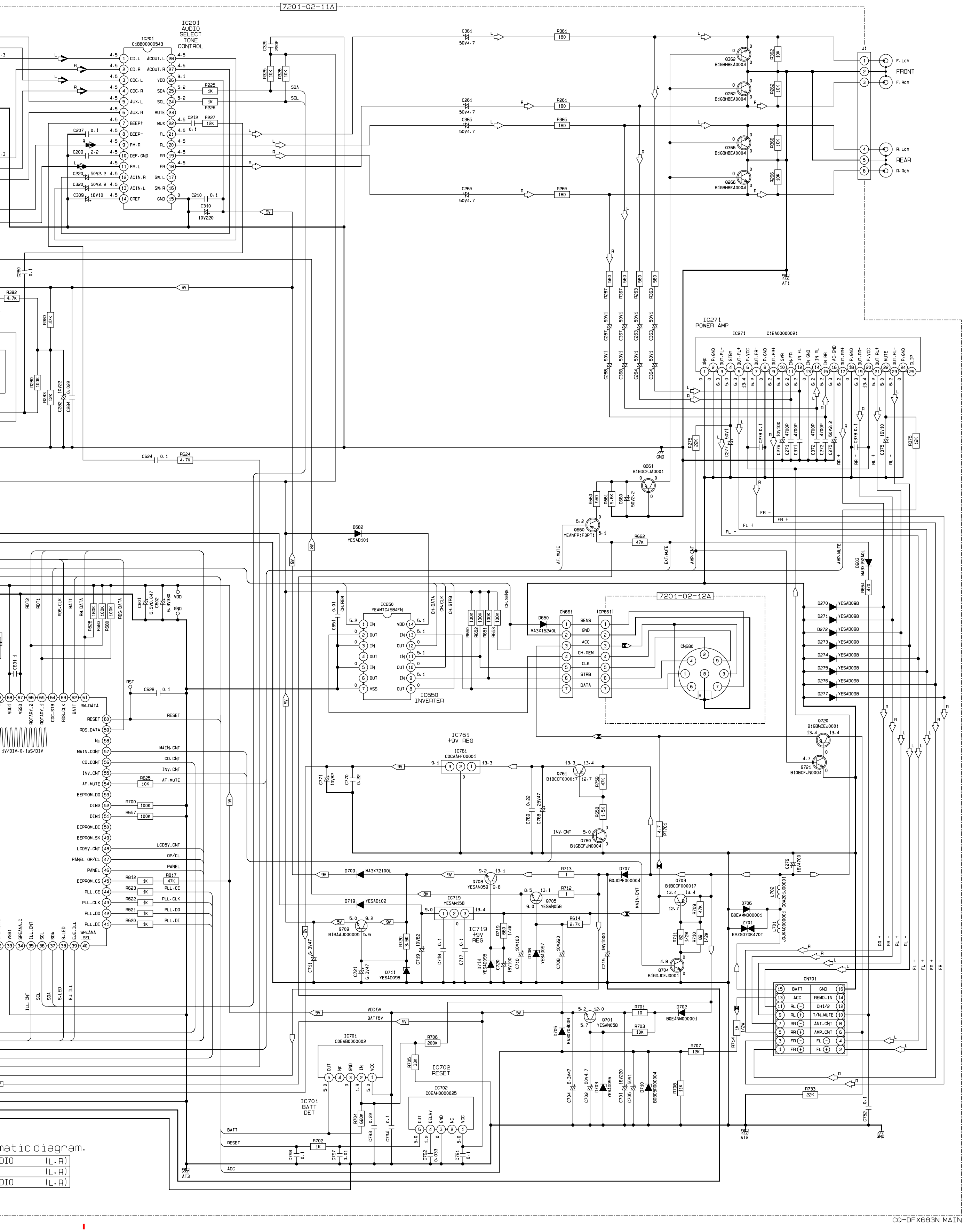
21 SCHEMATIC DIAGRAM-2

21.1. Main Block [CQ-DFX683N]

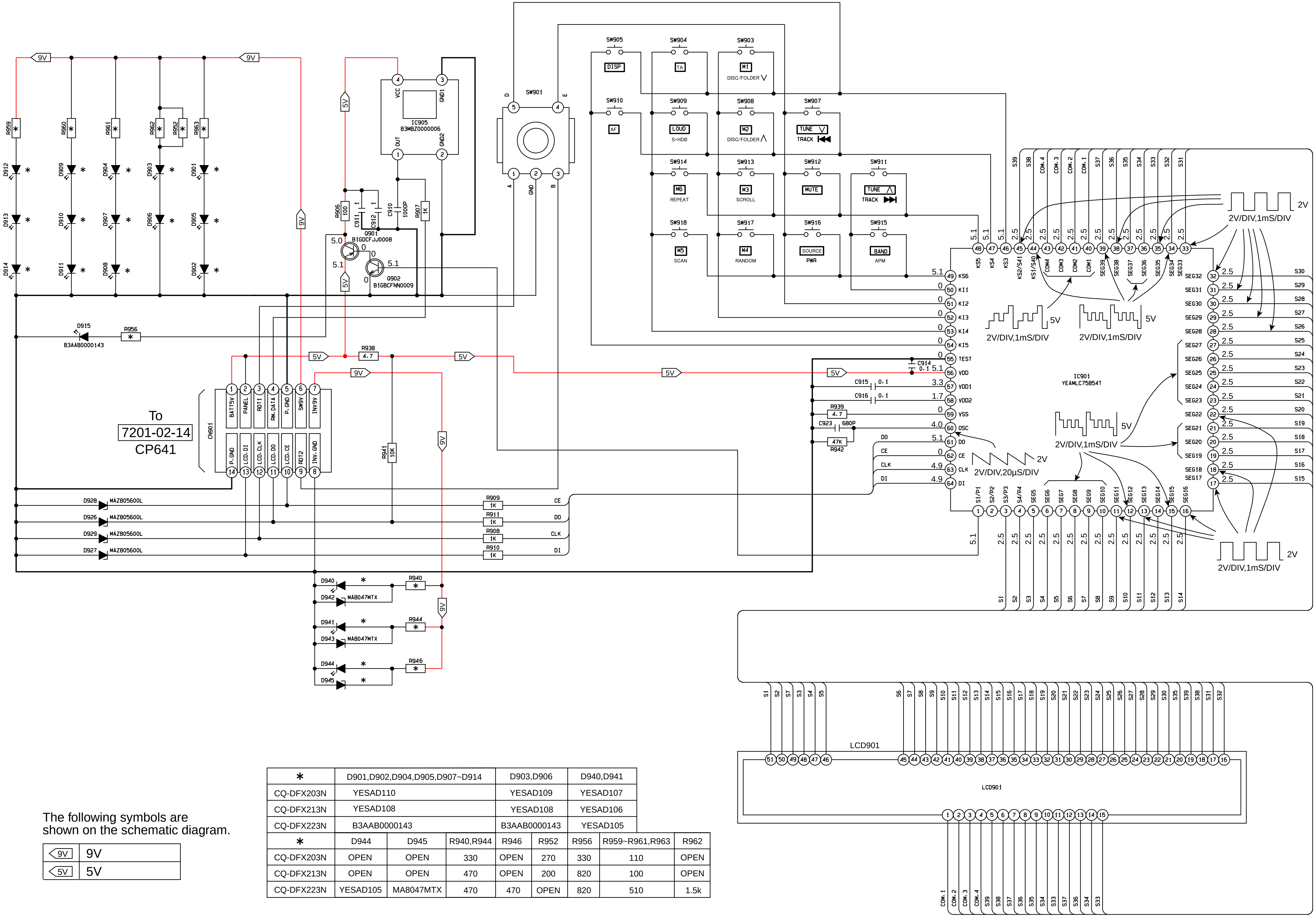

PA51 FM/AM TUNER PACK
PA51 YESAP263
ANT51
CD.C-IN
Lch
Rch
CN251
IC201 C1BB00000543
IC501 RDS DECODER
IC401 PLL
IC280 BUFFER
IC783 +3.3V REG
IC783 YESAM164
IC781 C0CAAHF00001
IC781 +9V REG
Q781 B1BCCF000017
Q782 B1GBCFJN0004
D713 B0EANM000001
IC681 TC7SET08F
IC681 INVERTER
CN681
TO 3032-14-02 CN101
IC601 CPU
IC601 YESAM181
2V/DIV.50uS/DIV
1V/DIV.0.1uS/DIV
2V/DIV.20mS/DIV
SW601
PANEL.SW
CN602
CN601
TO 7201-02-13 CJ642
TO 7201-02-14 CN640

The following symbols are shown on the schematic diagram.

◁	+B	8V	8V	◀	RADIO	(L.R)
◀	ACC	5V	5V	◁	CD	(L.R)
9V	9V	3.3V	3.3V	⇦	AUDIO	(L.R)


7201-02-11A
IC201 AUDIO SELECT TONE CONTROL
IC201 C1BB00000543
IC271 POWER AMP
IC271 C1EA00000021
J1
F.Lch
FRONT
F.Rch
R.Lch
REAR
R.Rch
Q362 B1GBHBEA0004
Q262 B1GBHBEA0004
Q366 B1GBHBEA0004
Q266 B1GBHBEA0004
AT1
Q661 B1GDCFJA0001
Q660 YEANFP1F3PT1
AF.MUTE
EXT.MUTE
AMP.CNT
D682 YESAD101
IC650 YEAMTC4584FN
IC650 INVERTER
7201-02-12A
CN661
CP661
SENS
GND
ACC
CH.REM
CLK
STRB
DATA
CN680
D650 MA3X152A0L
D270 YESAD098
D271 YESAD098
D272 YESAD098
D273 YESAD098
D274 YESAD098
D275 YESAD098
D276 YESAD098
D277 YESAD098
Q720 B1GBNCEJ0001
Q721 B1GBCFJN0004
IC761 +9V REG
IC761 C0CAAHF00001
Q761 B1BCCF000017
Q760 B1GBCFJN0004
D709 MA3X72100L
Q708 YESAN059
D707 B0JCPE000004
Q703 B1BCCF000017
D719 YESAD102
IC719 YESAM158
IC719 +9V REG
Q705 YESAN058
Q709 B1BAAJ000005
D711 YESAD096
Q704 B1GDJCEJ0001
L702 G0A201J00001
D705 B0EAMM000001
Z701 ERZS07DK470T
L701 J0JKA0000001
CN701
BATT
ACC
REMO.IN
CH1/2
T/N.MUTE
ANT.CNT
AMP.CNT
GND
IC701 C0EAB0000002
IC701 BATT DET
IC702 RESET
IC702 C0EAH0000025
Q701 YESAN058
D702 B0EAMM000001
D705 MA3X70400R
AT2
AT3
GND
1V/DIV-0.1uS/DIV
matic diagram.
DIO (L.R)
DIO (L.R)
CQ-DFX683N MAIN

7201-05-01


To
7201-02-14
CP641
CN901
BATT5V
PANEL
RDT1
RM.DATA
P.GND
SW9V
INV9V
P.GND
LCD.DI
LCD.CLK
LCD.DO
LCD.CE
RDT2
INV.GND
IC905
B3MBZ000006
VCC
GND1
OUT
GND2
Q901
B1GDCFJJ0008
Q902
B1GBCFNN0009
R906 100
C911 1
C912 1
C910 1000P
R907 1K
SW901
D
E
A
GND
B
SW905 DISP
SW904 TA
SW903 M1 DISC/FOLDER ∨
SW910 AF
SW909 LOUD S•HDB
SW908 M2 DISC/FOLDER ∧
SW907 TUNE ∨ TRACK
SW914 M6 REPEAT
SW913 M3 SCROLL
SW912 MUTE
SW911 TUNE ∧ TRACK
SW918 M5 SCAN
SW917 M4 RANDOM
SW916 SOURCE PWR
SW915 BAND APM
D915 B3AAB0000143
R956
R938 4.7
R941 10K
D928 MAZ805600L
D926 MAZ805600L
D929 MAZ805600L
D927 MAZ805600L
R909 1K CE
R911 1K DO
R908 1K CLK
R910 1K DI
D940
D942 MA8047MTX
R940
D941
D943 MA8047MTX
R944
D944
D945
R946
R959
R960
R961
R962
R952
R963
D912
D909
D904
D903
D901
D913
D910
D907
D906
D905
D914
D911
D908
D902
9V
5V
IC901
YEAMLC75854T
KS6
KI1
KI2
KI3
KI4
KI5
TEST
VDD
VDD1
VDD2
VSS
OSC
DO
CE
CLK
DI
C914 0.1
C915 0.1
C916 0.1
R939 4.7
C923 680P
R942 47K
2V/DIV,1mS/DIV
2V/DIV,20µS/DIV
LCD901
COM.1
COM.2
COM.3
COM.4

∗	D901,D902,D904,D905,D907~D914	D903,D906	D940,D941
CQ-DFX203N	YESAD110	YESAD109	YESAD107
CQ-DFX213N	YESAD108	YESAD108	YESAD106
CQ-DFX223N	B3AAB0000143	B3AAB0000143	YESAD105

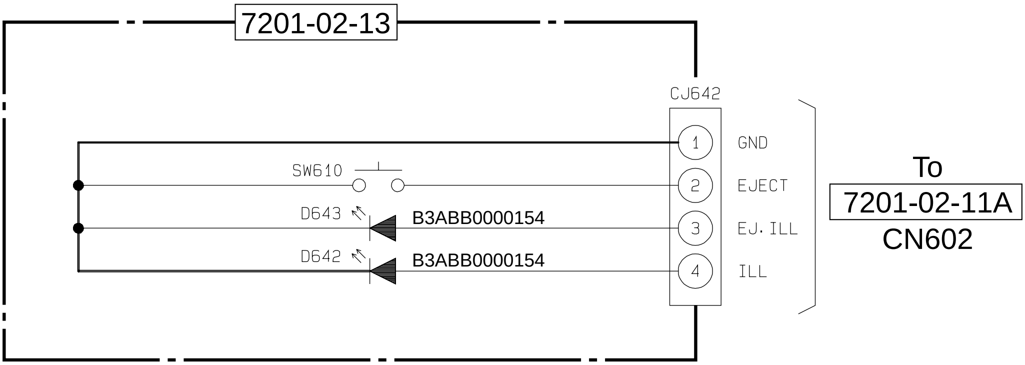
∗	D944	D945	R940,R944	R946	R952	R956	R959~R961,R963	R962
CQ-DFX203N	OPEN	OPEN	330	OPEN	270	330	110	OPEN
CQ-DFX213N	OPEN	OPEN	470	OPEN	200	820	100	OPEN
CQ-DFX223N	YESAD105	MA8047MTX	470	470	OPEN	820	510	1.5k

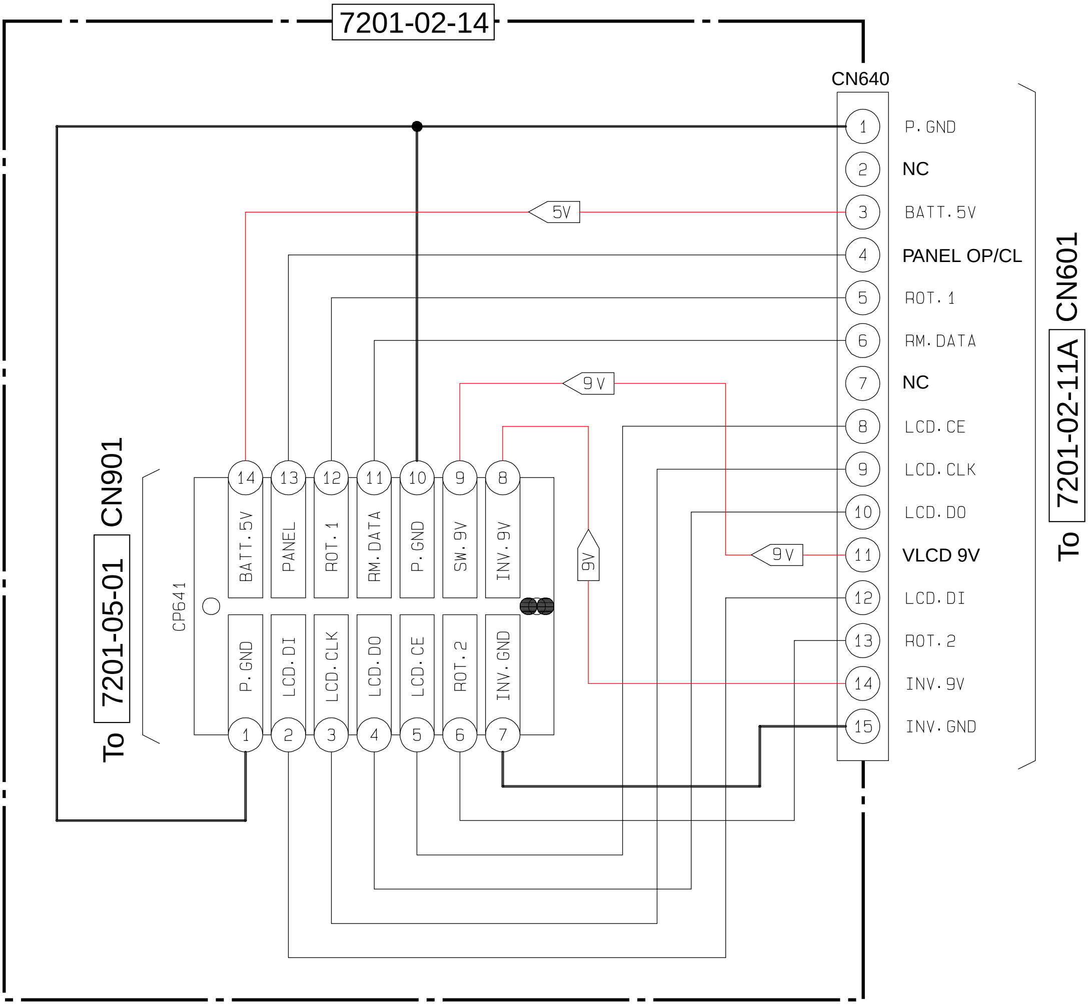
The following symbols are shown on the schematic diagram.

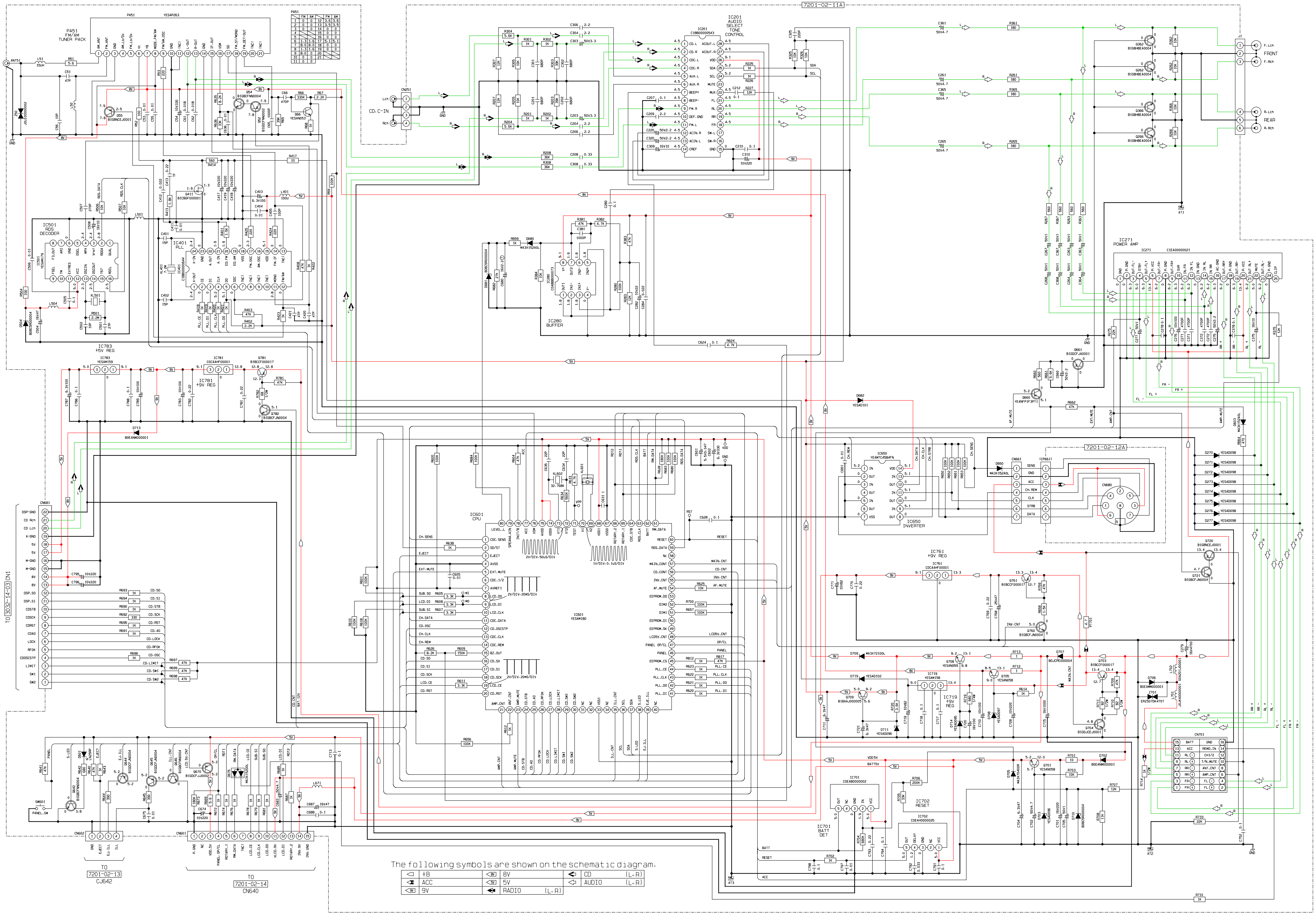
9V	9V
5V	5V

The following symbols are shown on the schematic diagram.

◁ 9V	9V
◁ 5V	5V


7201-02-13
CJ642
1
2
3
4
GND
EJECT
EJ. ILL
ILL
SW610
D643
D642
B3ABB0000154
B3ABB0000154
To
7201-02-11A
CN602

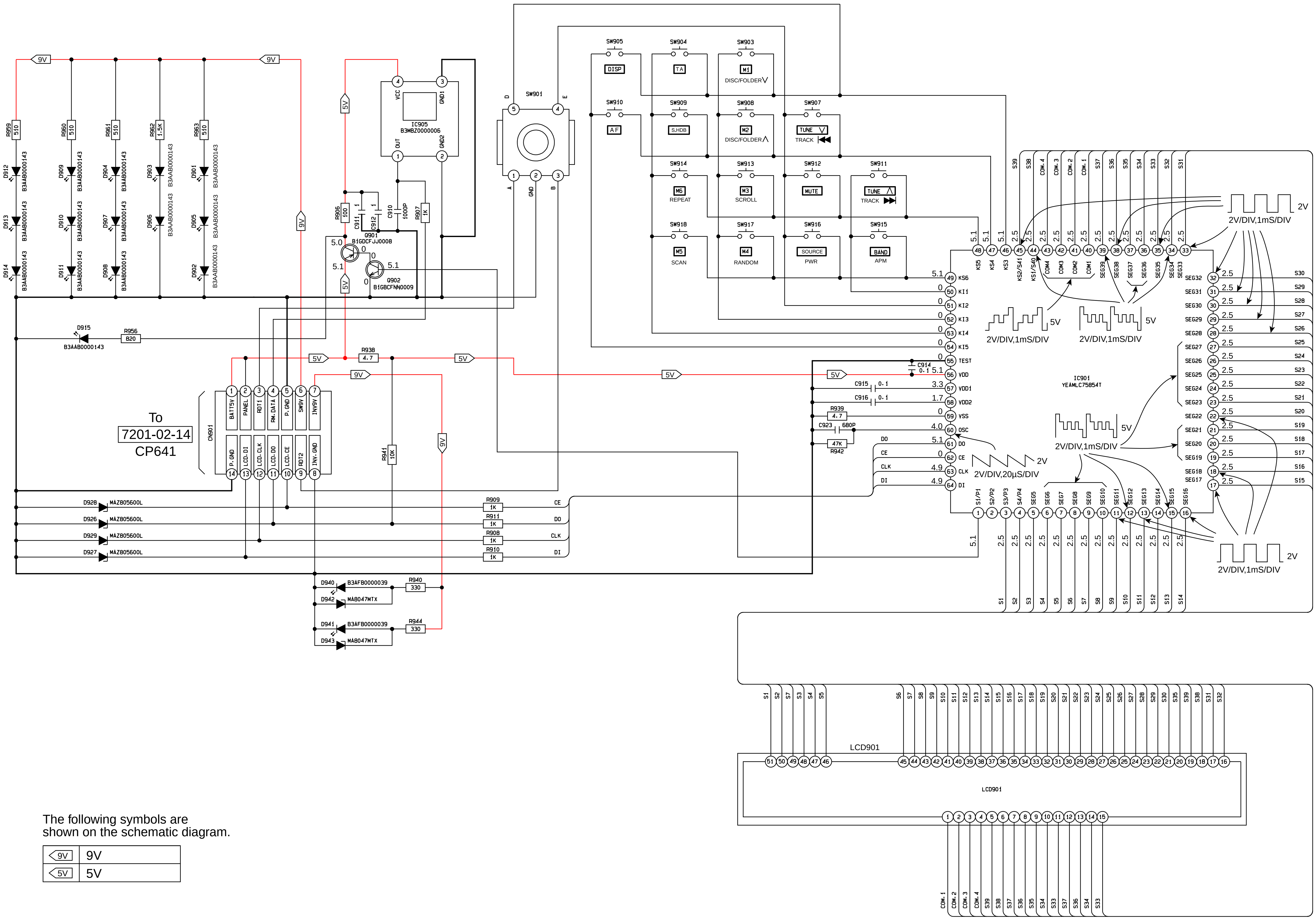

7201-02-14
CN640
1 P. GND
2 NC
3 BATT. 5V
4 PANEL OP/CL
5 ROT. 1
6 RM. DATA
7 NC
8 LCD. CE
9 LCD. CLK
10 LCD. DO
11 VLCD 9V
12 LCD. DI
13 ROT. 2
14 INV. 9V
15 INV. GND
To 7201-02-11A CN601
5V
9V
9V
9V
CP641
14 BATT. 5V
13 PANEL
12 ROT. 1
11 RM. DATA
10 P. GND
9 SW. 9V
8 INV. 9V
1 P. GND
2 LCD. DI
3 LCD. CLK
4 LCD. DO
5 LCD. CE
6 ROT. 2
7 INV. GND
To 7201-05-01 CN901


7201-02-11A
PA51 FM/AM TUNER PACK
YESAP263
ANT51
IC501 RDS DECODER
IC401 PLL
XL501
IC783 +5V REG
IC781 +9V REG
CN251
CD.C-IN
Lch
Rch
IC201 AUDIO SELECT TONE CONTROL
C1BB00000543
IC280 BUFFER
IC271 POWER AMP
C1EA00000021
J1
F.Lch
FRONT
F.Rch
R.Lch
REAR
R.Rch
AT1
AT2
AT3
CN681
TO 3032-14-03 CN1
DSP-GND
CD Rch
CD Lch
A-GND
5V
M-GND
8V
DSP.SO
DSP.SI
CDSTB
CDSCK
CDRST
CDAO
LOCK
RFOK
CDDSCSTP
LIMIT
SW1
SW2
IC601 CPU
YESAM180
2V/DIV-50uS/DIV
1V/DIV-0.1uS/DIV
2V/DIV-20mS/DIV
IC650 INVERTER
YEAMTC4584FN
CN661
CN680
7201-02-12A
IC761 +9V REG
C0CAAHF00001
IC719 +9V REG
IC701 BATT DET
C0EAB0000002
IC702 RESET
C0EAB0000025
CN701
SW601
PANEL.SW
CN602
CN601
TO 7201-02-13 CJ642
TO 7201-02-14 CN640

The following symbols are shown on the schematic diagram.

◁	+B	◁8V	8V	⬅	CD (L.R)
◀	ACC	◁5V	5V	⇦	AUDIO (L.R)
◁9V	9V	⇇	RADIO (L.R)		

7201-05-01

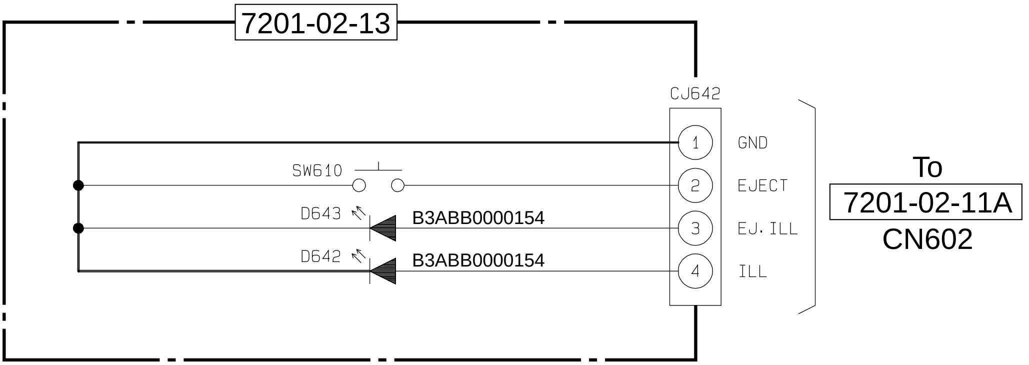

9V
5V
R959 510
R960 510
R961 510
R962 1.5K
R963 510
D912
D913
D914
D909
D910
D911
D904
D907
D908
D903
D906
D901
D905
D902
B3AAB0000143
D915
R956 820
IC905 B3MBZ0000006
VCC
GND1
OUT
GND2
R906 100
C911
C912
C910 1000P
R907 1K
Q901 B1GDCFJJ0008
Q902 B1GBCFNN0009
SW901
D
E
A
GND
B
SW905 DISP
SW904 TA
SW903 M1 DISC/FOLDER∨
SW910 AF
SW909 S.HDB
SW908 M2 DISC/FOLDER∧
SW907 TUNE ∨ TRACK
SW914 M6 REPEAT
SW913 M3 SCROLL
SW912 MUTE
SW911 TUNE ∧ TRACK
SW918 M5 SCAN
SW917 M4 RANDOM
SW916 SOURCE PWR
SW915 BAND APM
R938 4.7
To
7201-02-14
CP641
CN901
BATT5V
PANEL
RDT1
RM.DATA
P.GND
SW9V
INV9V
P.GND
LCD.DI
LCD.CLK
LCD.DO
LCD.CE
RDT2
INV.GND
R941 10K
D928 MAZ805600L
D926 MAZ805600L
D929 MAZ805600L
D927 MAZ805600L
R909 1K CE
R911 1K DO
R908 1K CLK
R910 1K DI
D940 B3AFB0000039
D942 MA8047MTX
R940 330
D941 B3AFB0000039
D943 MA8047MTX
R944 330
C914 0.1
C915 0.1
C916 0.1
R939 4.7
C923 680P
R942 47K
IC901 YEAMLC75854T
KS6 KI1 KI2 KI3 KI4 KI5 TEST VDD VDD1 VDD2 VSS OSC DO CE CLK DI
KS5 KS4 KS3 KS2/S41 KS1/S40 COM4 COM3 COM2 COM1 SEG39 SEG38 SEG37 SEG36 SEG35 SEG34 SEG33
SEG32 SEG31 SEG30 SEG29 SEG28 SEG27 SEG26 SEG25 SEG24 SEG23 SEG22 SEG21 SEG20 SEG19 SEG18 SEG17
S1/P1 S2/P2 S3/P3 S4/P4 SEG5 SEG6 SEG7 SEG8 SEG9 SEG10 SEG11 SEG12 SEG13 SEG14 SEG15 SEG16
2V/DIV,1mS/DIV
2V/DIV,20µS/DIV
2V
5V
LCD901
COM.1 COM.2 COM.3 COM.4
S1 S2 S3 S4 S5 S6 S7 S8 S9 S10 S11 S12 S13 S14 S15 S16 S17 S18 S19 S20 S21 S22 S23 S24 S25 S26 S27 S28 S29 S30 S31 S32 S33 S34 S35 S36 S37 S38 S39

The following symbols are
shown on the schematic diagram.

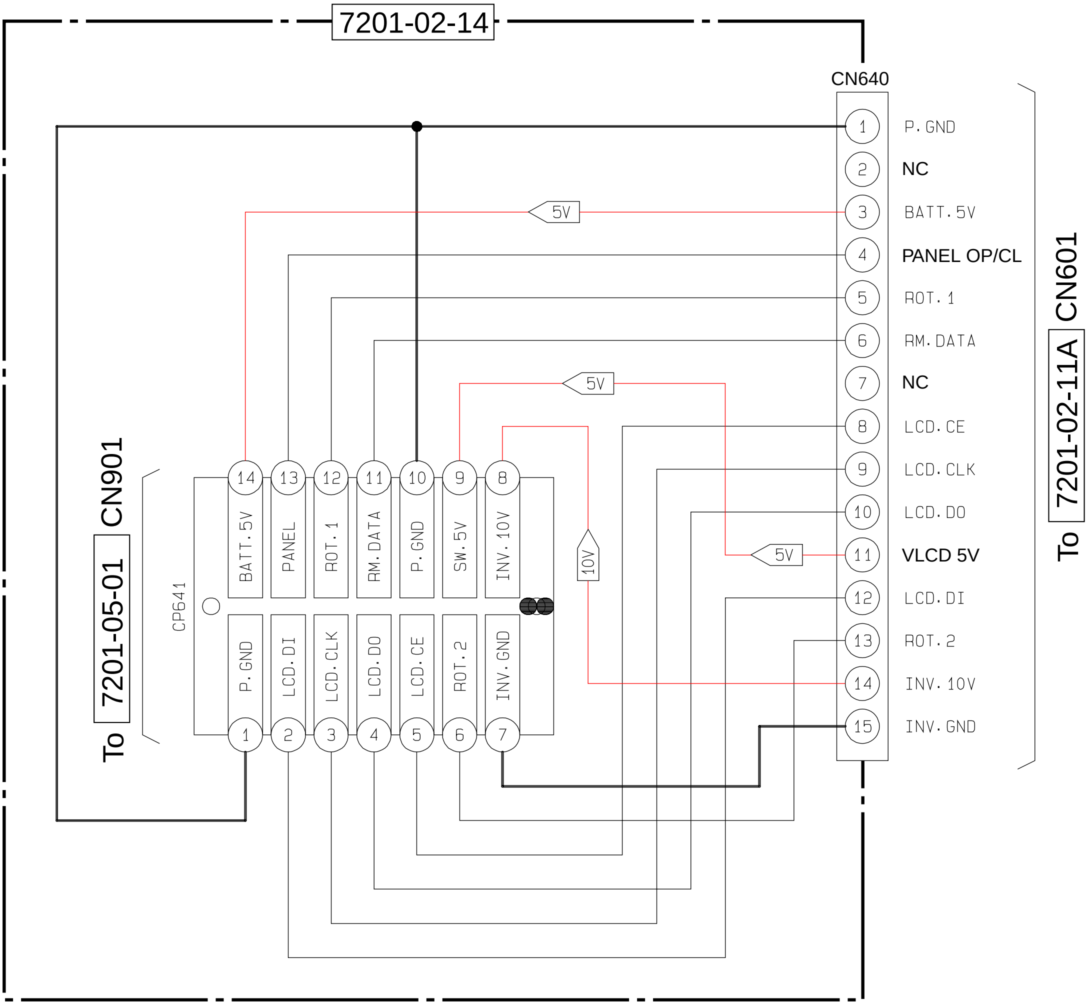
9V	9V
5V	5V

The following symbols are shown on the schematic diagram.

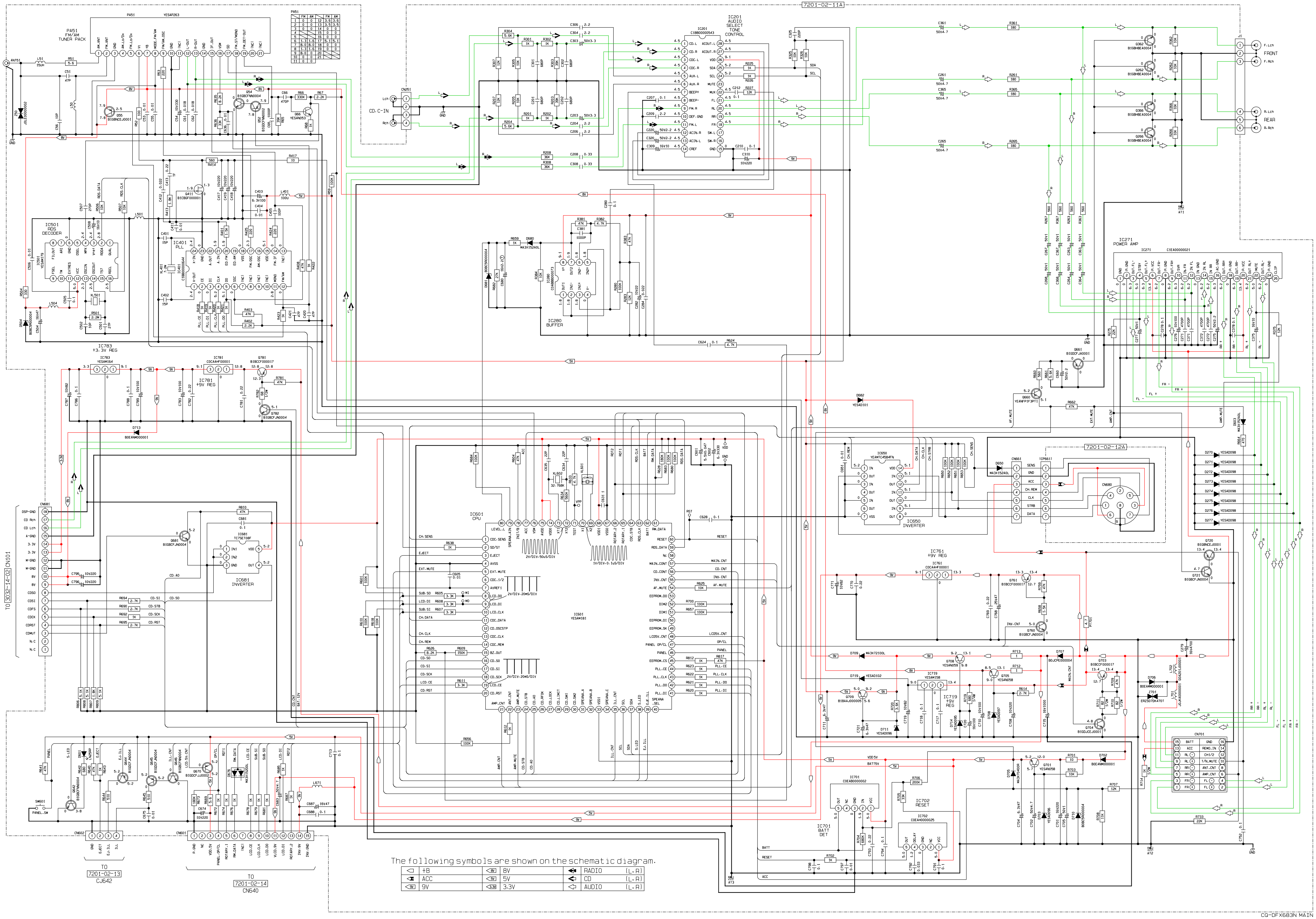
10V	10V
5V	5V



7201-02-13
CJ642
SW610
D643
B3ABB0000154
D642
B3ABB0000154
1
2
3
4
GND
EJECT
EJ.ILL
ILL
To
7201-02-11A
CN602



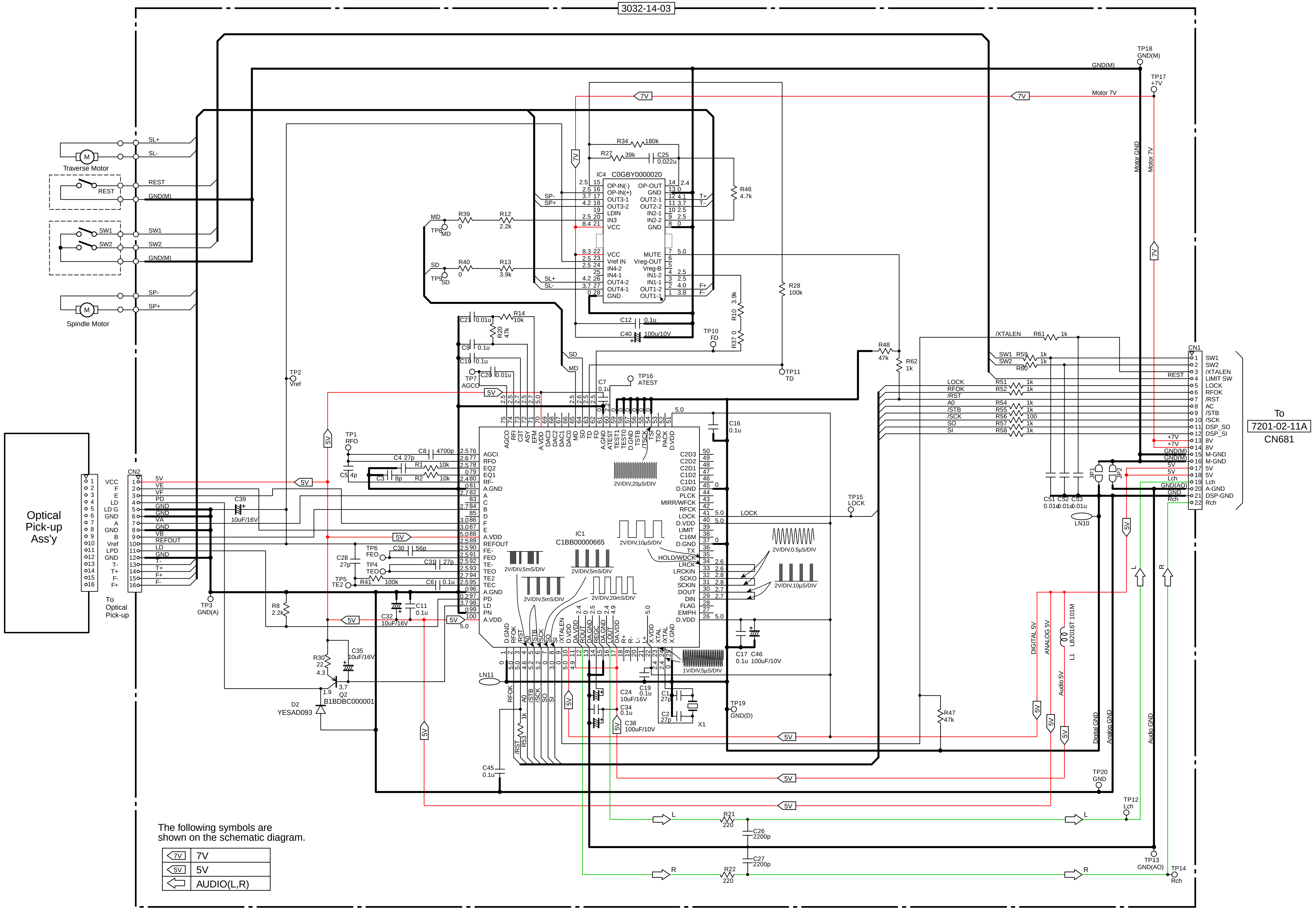
7201-02-14
CN640
1 P.GND
2 NC
3 BATT.5V
4 PANEL OP/CL
5 ROT.1
6 RM.DATA
7 NC
8 LCD.CE
9 LCD.CLK
10 LCD.DO
11 VLCD 5V
12 LCD.DI
13 ROT.2
14 INV.10V
15 INV.GND
To 7201-02-11A CN601
5V
5V
5V
10V
CP641
14 BATT.5V
13 PANEL
12 ROT.1
11 RM.DATA
10 P.GND
9 SW.5V
8 INV.10V
1 P.GND
2 LCD.DI
3 LCD.CLK
4 LCD.DO
5 LCD.CE
6 ROT.2
7 INV.GND
To 7201-05-01 CN901


PA51 FM/AM TUNER PACK
YESAP263
ANT51
IC501 RDS DECODER
IC401 PLL
IC783 +3.3V REG
IC781 +9V REG
IC681 INVERTER
7201-02-11A
CD.C-IN
Lch
Rch
IC201 AUDIO SELECT TONE CONTROL
IC280 BUFFER
J1
F.Lch
FRONT
F.Rch
R.Lch
REAR
R.Rch
IC271 POWER AMP
IC601 CPU
YESAM181
IC650 INVERTER
7201-02-12A
CN661
CP661
CN680
IC761 +9V REG
IC719 +9V REG
IC701 BATT DET
IC702 RESET
CN701
CN681
TO 3032-14-02 CN101
CN602
TO 7201-02-13 CJ642
CN601
TO 7201-02-14 CN640
SW601 PANEL SW

The following symbols are shown on the schematic diagram.

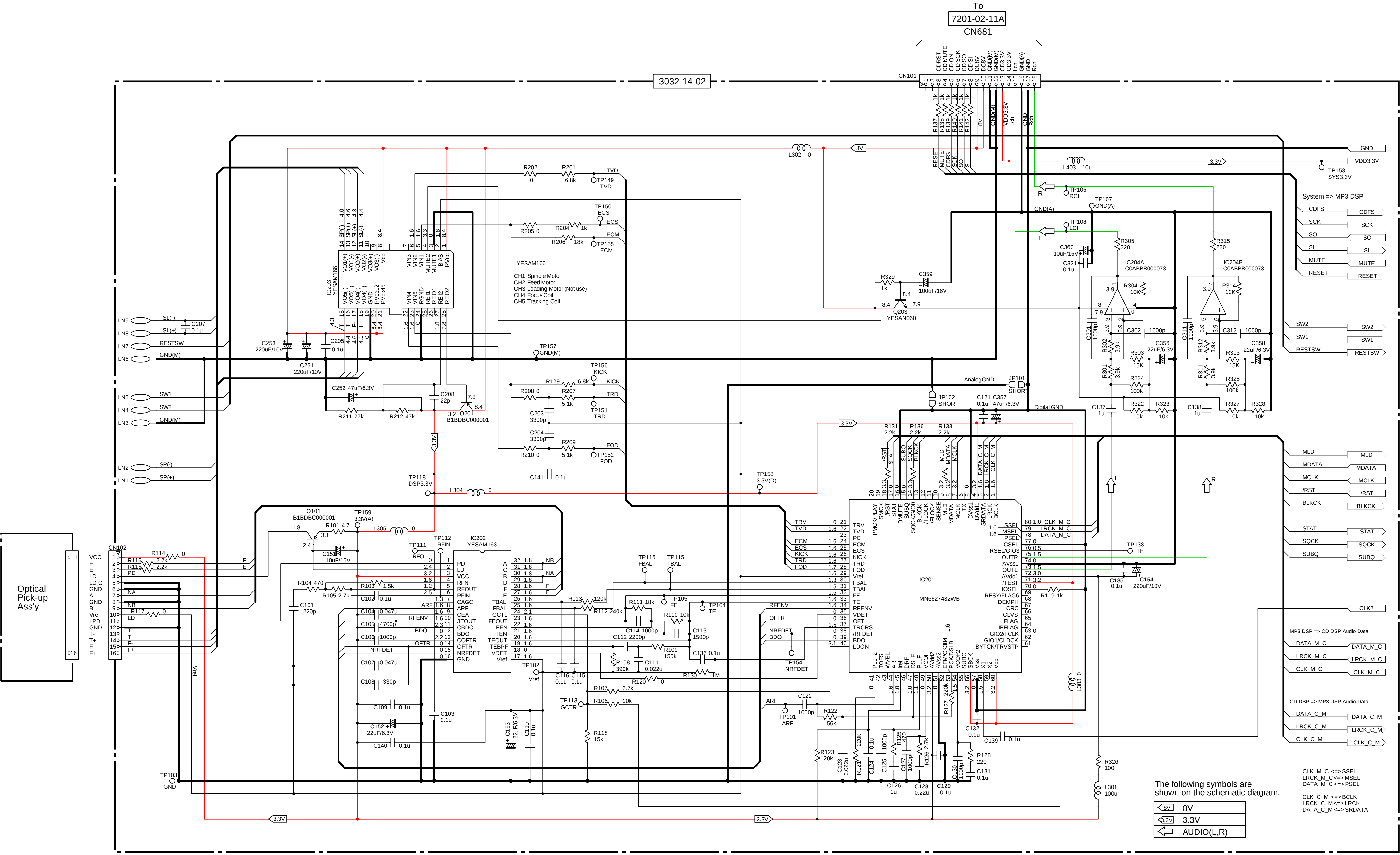
◁	+B	◁8V	8V	◀	RADIO (L, R)
◁	ACC	◁5V	5V	⇦	CD (L, R)
◁9V	9V	◁3.3V	3.3V	⇦	AUDIO (L, R)

CQ-DFX683N MAIN


3032-14-03
Traverse Motor
Spindle Motor
REST
SW1
SW2
SL+
SL-
GND(M)
SP-
SP+
Optical Pick-up Ass'y
CN2
VCC
F
E
LD
LD G
GND
A
B
Vref
LPD
T-
T+
F-
F+
To Optical Pick-up
TP3 GND(A)
IC4 C0GBY0000020
OP-IN(-)
OP-IN(+)
OUT3-1
OUT3-2
LDIN
IN3
VCC
OP-OUT
OUT2-1
OUT2-2
IN2-1
IN2-2
Vref IN
IN4-2
IN4-1
OUT4-2
OUT4-1
MUTE
Vreg-OUT
Vreg-B
IN1-2
IN1-1
OUT1-2
OUT1-1
R34 180k
R27 39k
C25 0.022u
R46 4.7k
R39 0
R12 2.2k
R40 0
R13 3.9k
TP8 MD
TP9 SD
R28 100k
R10 3.9k
R37 0
C12 0.1u
C40 100u/10V
TP10 FD
TP11 TD
TP16 ATEST
IC1 C1BB00000665
AGCO
RFI
C3T
ASY
EFM
A.VDD
DAC3
DAC2
DAC1
DAC0
MD
SD
TD
FD
A.GND
ATEST1
TEST0
D.GND
TSTB
/TSCK
TSO
PACK
D.VDD
AGCI
RFO
EQ2
EQ1
RF-
A
C
B
D
F
E
REFOUT
FE-
FEO
TE-
TEO
TE2
TEC
PD
LD
PN
C2D3
C2D2
C2D1
C1D2
C1D1
PLCK
MIRR/WFCK
RFCK
LOCK
LIMIT
C16M
TX
HOLD/WDCK
LRCK
LRCKIN
SCKO
SCKIN
DOUT
DIN
FLAG
EMPH
RFOK
/RST
A0
/STB
/SCK
SO
SI
/XTALEN
DA.VDD
DA.GND
ROUT
REGC
LOUT
R+
R-
L-
L+
X.VDD
XTAL
/XTAL
X.GND
2V/DIV,20µS/DIV
2V/DIV,10µS/DIV
2V/DIV,0.5µS/DIV
2V/DIV,5mS/DIV
2V/DIV,20mS/DIV
1V/DIV,5µS/DIV
TP1 RFO
TP2 Vref
TP4 TEO
TP5 TE2
TP6 FEO
TP7 AGCO
TP15 LOCK
TP19 GND(D)
Q2 B1BDBC000001
D2 YESAD093
X1
LN10
LN11
L1 LB2016T 101M
DIGITAL 5V
ANALOG 5V
Audio 5V
Digital GND
Analog GND
Audio GND
Motor GND
Motor 7V
TP12 Lch
TP13 GND(AO)
TP14 Rch
TP17 +7V
TP18 GND(M)
TP20 GND
CN1
To
7201-02-11A
CN681
LIMIT SW
M-GND
A-GND
DSP-GND
DSP_SO
DSP_SI
Lch
Rch

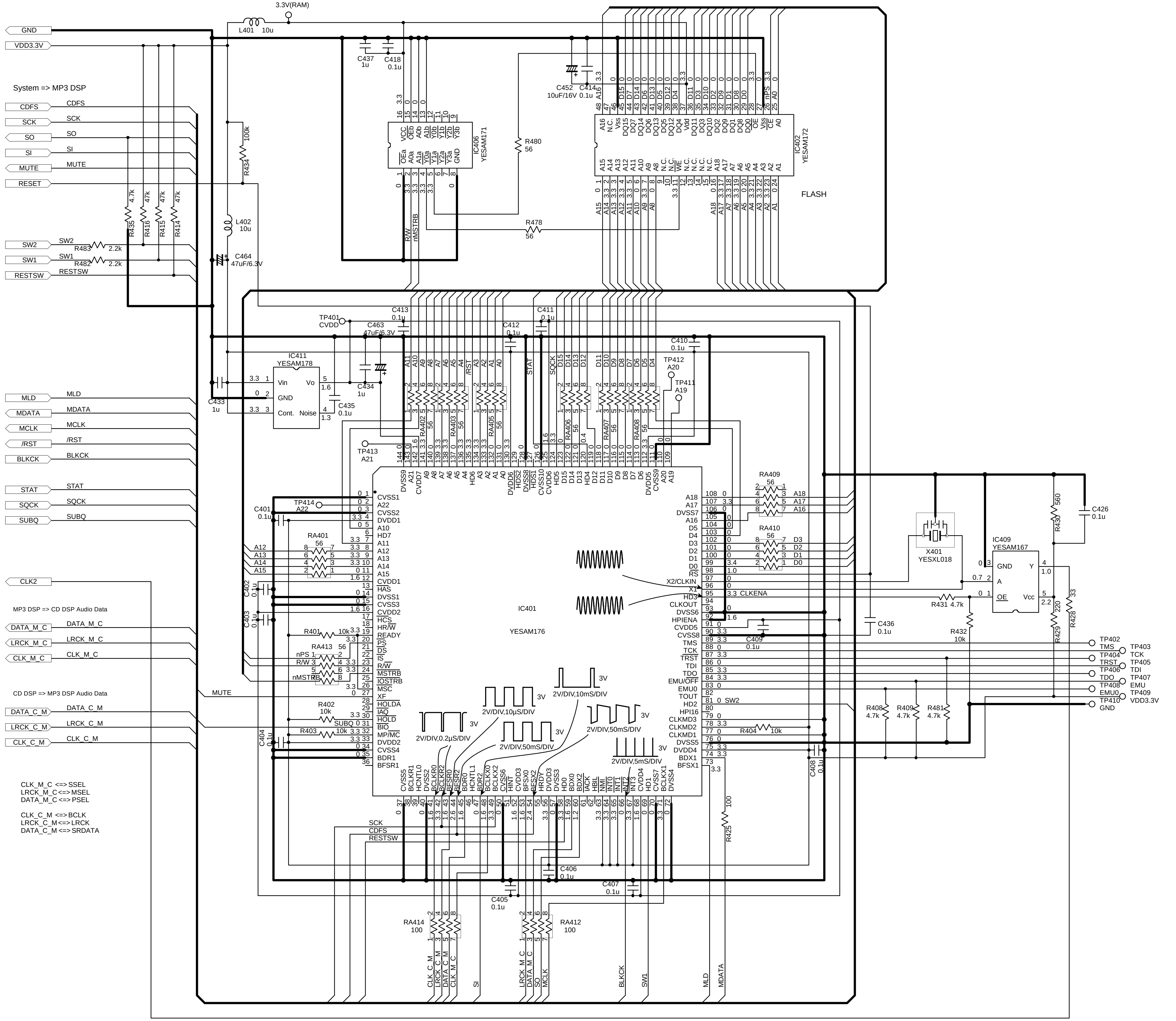
The following symbols are shown on the schematic diagram.

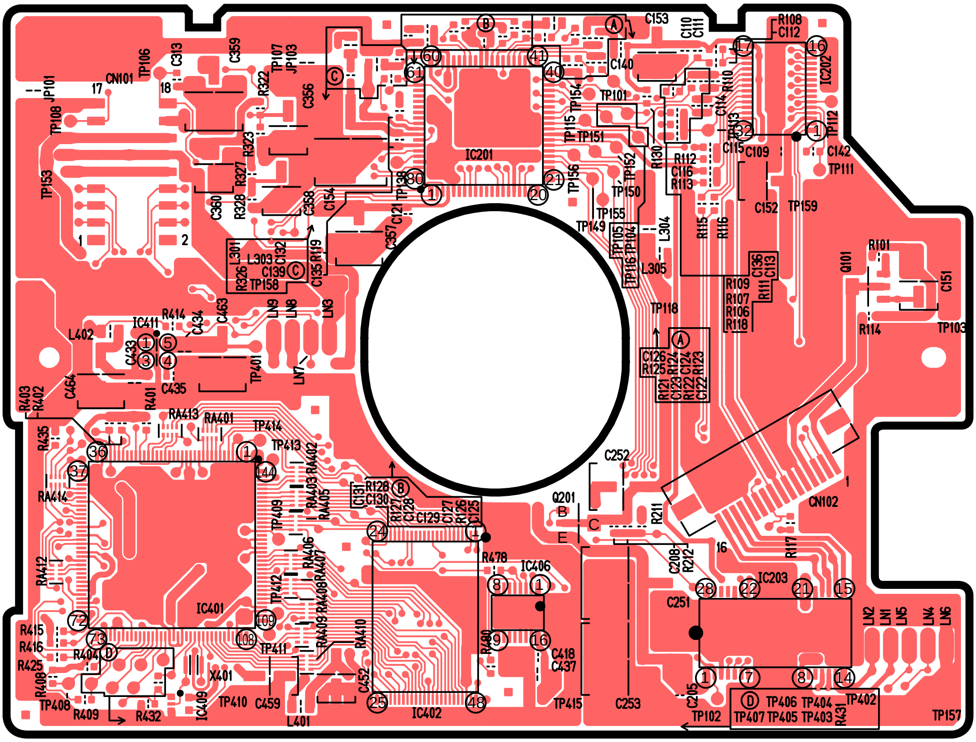
7V	7V
5V	5V
⇦	AUDIO(L,R)


To
7201-02-11A
CN681
3032-14-02
CN101
CDRST
CD MUTE
CD ON
CD SCK
CD SO
CD SI
DC8V
DC8V
GND(M)
GND(M)
CD3.3V
CD3.3V
Lch
GND(A)
GND
Rch
R137
R138
R139
R140
R141
R142
1k
8V
GND(M)
VDD3.3V
Lch
GND
Rch
RESET
MUTE
CDFS
SCK
SO
SI
L302 0
L403 10u
TP153
SYS3.3V
GND
VDD3.3V
System => MP3 DSP
CDFS
SCK
SO
SI
MUTE
RESET
TP106
RCH
TP107
GND(A)
TP108
LCH
GND(A)
R305
220
R315
220
C360
10uF/16V
C321
0.1u
IC204A
C0ABBB000073
IC204B
C0ABBB000073
R304
10K
R314
10K
R329
1k
C359
100uF/16V
Q203
YESAN060
C301
1000p
C311
1000p
C302 1000p
C312 1000p
R302
3.9k
R312
3.9k
R303
15K
R313
15K
C356
22uF/6.3V
C358
22uF/6.3V
R301
3.9k
R311
3.9k
R324
100k
R325
100k
R322
10k
R323
10k
R327
10k
R328
10k
C137
1u
C138
1u
SW2
SW1
RESTSW
AnalogGND
JP101
SHORT
JP102
SHORT
C121 C357
0.1u 47uF/6.3V
Digital GND
R131
2.2k
R136
2.2k
R133
2.2k
MLD
MDATA
MCLK
/RST
BLKCK
STAT
SQCK
SUBQ
CLK2
MP3 DSP => CD DSP Audio Data
DATA_M_C
LRCK_M_C
CLK_M_C
CD DSP => MP3 DSP Audio Data
DATA_C_M
LRCK_C_M
CLK_C_M
CLK_M_C <=> SSEL
LRCK_M_C <=> MSEL
DATA_M_C <=> PSEL
CLK_C_M <=> BCLK
LRCK_C_M <=> LRCK
DATA_C_M <=> SRDATA
R202
0
R201
6.8k
TVD
TP149
TVD
TP150
ECS
ECS
R205 0
R204 1k
ECM
R206 18k
TP155
ECM
IC203
YESAM166
YESAM166
CH1 Spindle Motor
CH2 Feed Motor
CH3 Loading Motor (Not use)
CH4 Focus Coil
CH5 Tracking Coil
VO1(+)
VO1(-)
VO2(+)
VO2(-)
VO3(+)
VO3(-)
Vcc
VIN3
VIN2
VIN1
MUTE2
MUTE1
BIAS
RVcc
VO5(-)
VO5(+)
VO4(-)
VO4(+)
GND
PVcc12
PVcc45
VIN4
VIN5
RGND
REI1
REO1
REI2
REO2
SP(-)
SP(+)
SL(+)
SL(-)
LN9
LN8
LN7
LN6
LN5
LN4
LN3
LN2
LN1
SL(-)
SL(+)
C207
0.1u
RESTSW
GND(M)
SW1
SW2
GND(M)
SP(-)
SP(+)
C253
220uF/10V
C251
220uF/10V
C205
0.1u
TP157
GND(M)
TP156
KICK
R129 6.8k
KICK
R208 0
R207
5.1k
TRD
TP151
TRD
C203
3300p
C204
3300p
R210 0
R209
5.1k
FOD
TP152
FOD
C252 47uF/6.3V
C208
22p
R211 27k
R212 47k
Q201
B1BDBC000001
3.3V
TP118
DSP3.3V
C141 0.1u
TP158
3.3V(D)
L304 0
Q101
B1BDBC000001
TP159
3.3V(A)
R101 4.7
L305 0
C151
10uF/16V
TP111
RFO
TP112
RFIN
IC202
YESAM163
PD
LD
VCC
RFN
RFOUT
RFIN
CAGC
ARF
CEA
3TOUT
CBDO
BDO
COFTR
OFTR
NRFDET
GND
A
B
C
D
E
F
TBAL
FBAL
GCTL
FEOUT
FEN
TEN
TEOUT
TEBPF
VDET
Vref
NB
NA
F
E
R104 470
R105 2.7k
R103 1.5k
C102 0.1u
C101
220p
C104 0.047u
C105 4700p
C106 1000p
C107 0.047u
C108 330p
C109 0.1u
C152
22uF/6.3V
C140 0.1u
C103
0.1u
C153
22uF/6.3V
C110
0.1u
TP102
Vref
C116 0.1u
C115 0.1u
TP113
GCTR
R107 2.7k
R106 10k
R118
15k
R113 120k
R112 240k
R111 18k
C114 1000p
C112 2200p
R110 10k
C113
1500p
R109
150k
R108
390k
C111
0.022u
R120 0
R130 1M
C136 0.1u
TP116
FBAL
TP115
TBAL
TP105
FE
TP104
TE
RFENV
OFTR
NRFDET
BDO
TP154
NRFDET
Optical
Pick-up
Ass'y
CN102
VCC
F
E
LD
LD G
GND
A
GND
B
Vref
LPD
GND
T-
T+
F-
F+
R114 0
R116 2.2k
R115 2.2k
PD
NA
NB
R117 0
LD
T-
T+
F-
F+
Vref
TP103
GND
IC201
MN6627482WB
TRV
TVD
PC
ECM
ECS
KICK
TRD
FOD
Vref
FBAL
TBAL
FE
TE
RFENV
VDET
OFT
TRCRS
/RFDET
BDO
LDON
PMCK/PLAY
SMCK
/RST
STAT
DMUTE
SUBQ
SQCK/GIO0
BLKCK
/TLOCK
/FLOCK
SENSE
MLD
MDATA
MCLK
DVss1
DVdd1
SRDATA
LRCK
BCLK
SSEL
MSEL
PSEL
CSEL
RSEL/GIO3
OUTR
AVss1
OUTL
AVdd1
/TEST
IOSEL
RESY/GIO4
DEMPH
CRC
CLVS
FLAG
IPFLAG
GIO2/FCLK
GIO1/CLCDCK
BYTCK/TRVSTP
PLLF2
TOFS
WVEL
ARF
Iref
DRF
DSLF
PLLF
VCOF
AVdd2
AVss2
EFM/CK384
PCK/DSLB
VCOF2
SUBC
SBCK
Vss
X1
X2
Vdd
TP138
TP
C135
0.1u
C154
220uF/10V
R119 1k
L303 0
ARF
TP101
ARF
C122
1000p
R122
56k
R123
120k
C123
0.022u
R121
220k
C124
0.1u
C125
1000p
R125
470
C127
1000p
R126 2.7k
R127 220k
C126
1u
C128
0.22u
C129
0.1u
C130
1000p
R128
220
C131
0.1u
C132
0.1u
C139 0.1u
R326
100
L301
100u
8V
3.3V
L
R

The following symbols are shown on the schematic diagram.

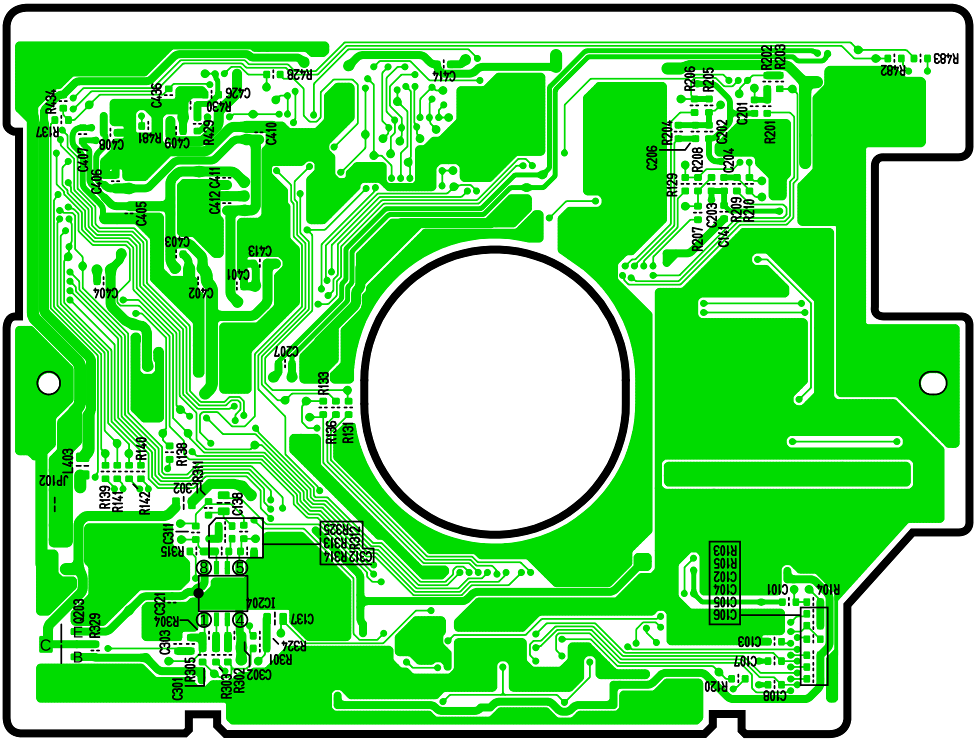
8V	8V
3.3V	3.3V
⇦	AUDIO(L,R)

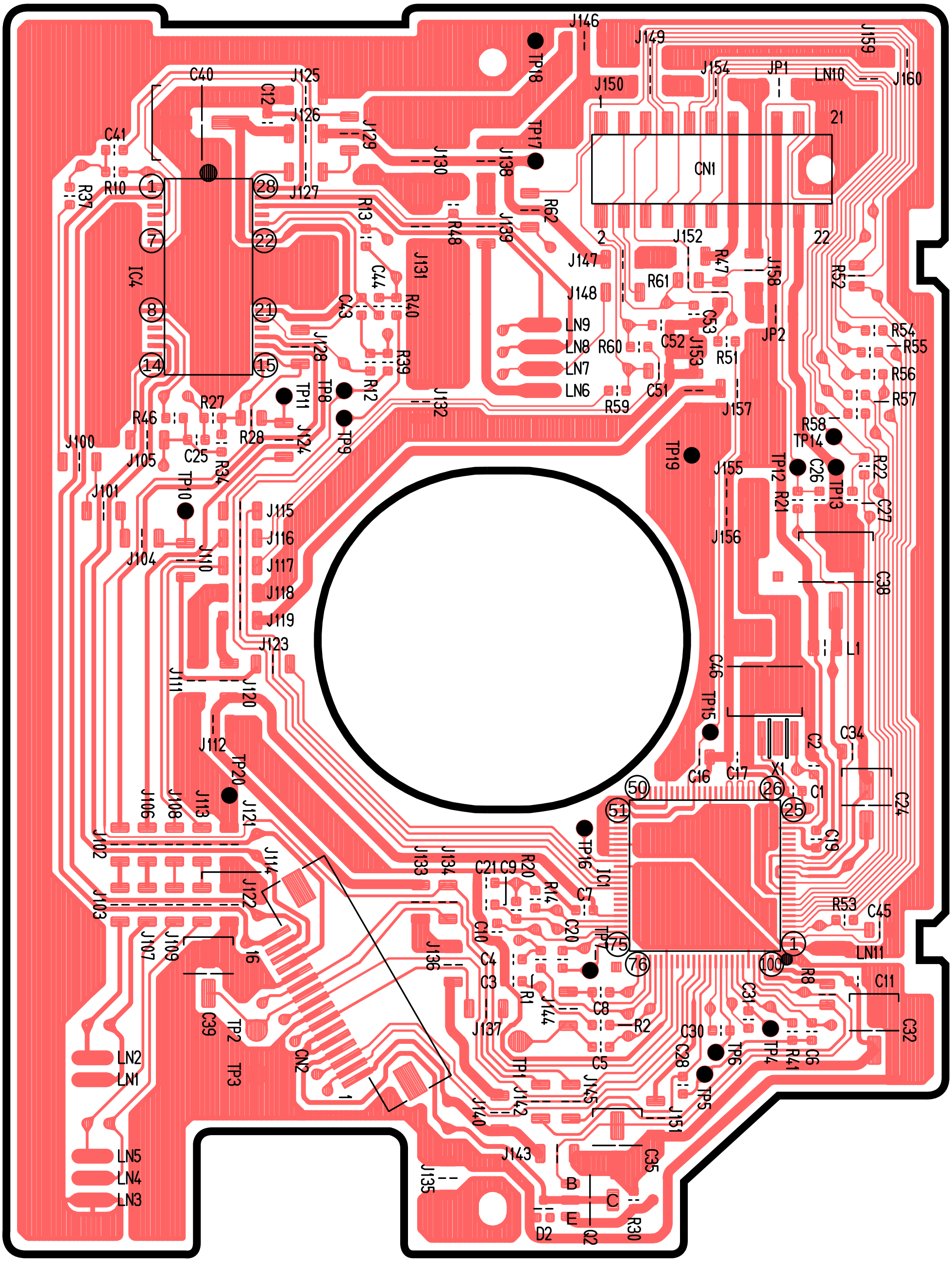

GND
VDD3.3V
TP415
3.3V(RAM)
L401 10u
C437 1u
C418 0.1u
System => MP3 DSP
CDFS
SCK
SO
SI
MUTE
RESET
R434 100k
R435 4.7k
R416 47k
R415 47k
R414 47k
L402 10u
C464 47uF/6.3V
SW2
SW1
RESTSW
R483 2.2k
R482 2.2k
IC406
YESAM171
R480 56
R478 56
R/W
nMSTRB
C452 10uF/16V
C414 0.1u
IC402
YESAM172
FLASH
TP401
CVDD
C413 0.1u
C463 47uF/6.3V
C412 0.1u
C411 0.1u
C410 0.1u
IC411
YESAM178
Vin
Vo
GND
Cont.
Noise
C434 1u
C435 0.1u
C433 1u
TP412 A20
TP411 A19
TP413 A21
TP414 A22
RA402 56
RA403 56
RA405 56
RA406 56
RA407 56
RA408 56
RA401 56
RA409 56
RA410 56
RA413 56
MLD
MDATA
MCLK
/RST
BLKCK
STAT
SQCK
SUBQ
CLK2
C401 0.1u
C402 0.1u
C403 0.1u
C404 0.1u
MP3 DSP => CD DSP Audio Data
DATA_M_C
LRCK_M_C
CLK_M_C
CD DSP => MP3 DSP Audio Data
DATA_C_M
LRCK_C_M
CLK_C_M
R401 10k
R402 10k
R403 10k
IC401
YESAM176
3V
2V/DIV,10mS/DIV
2V/DIV,10µS/DIV
2V/DIV,0.2µS/DIV
2V/DIV,50mS/DIV
2V/DIV,50mS/DIV
2V/DIV,5mS/DIV
X401
YESXL018
IC409
YESAM167
R430 560
C426 0.1u
R431 4.7k
R432 10k
R429 220
R428 33
C436 0.1u
C409 0.1u
CLKENA
TP402 TMS
TP403 TCK
TP404 TRST
TP405 TDI
TP406 TDO
TP407 EMU
TP408 EMU0
TP409 VDD3.3V
TP410 GND
R408 4.7k
R409 4.7k
R481 4.7k
R404 10k
C408 0.1u
R425 100
C406 0.1u
C405 0.1u
C407 0.1u
RA414 100
RA412 100
CLK_M_C <=> SSEL
LRCK_M_C <=> MSEL
DATA_M_C <=> PSEL
CLK_C_M <=> BCLK
LRCK_C_M <=> LRCK
DATA_C_M <=> SRDATA


IC201
IC401
IC402
IC406
IC411
IC203
IC202
IC409
CN101
CN102
Q101
Q201
X401
L301
L303
L304
L305
L401
L402
JP101
JP103
TP101
TP102
TP103
TP106
TP107
TP108
TP111
TP112
TP118
TP149
TP150
TP151
TP152
TP153
TP154
TP155
TP156
TP157
TP158
TP159
TP401
TP402
TP403
TP404
TP405
TP406
TP407
TP408
TP409
TP410
TP411
TP412
TP413
TP414
TP415
C153
C140
C142
C152
C109
C115
C116
C151
C251
C252
C253
C205
C208
C313
C356
C357
C358
C359
C360
C435
C463
C464
C452
C459
C418
C437
R101
R108
R112
R113
R114
R115
R116
R117
R130
R211
R212
R322
R323
R326
R327
R328
R401
R402
R403
R404
R408
R409
R410
R414
R415
R416
R425
R431
R432
R435
R478
RA401
RA402
RA403
RA405
RA406
RA407
RA408
RA409
RA412
RA413
RA414
LN1
LN2
LN3
LN4
LN5
LN6
LN7
LN8
LN9
Ⓐ
Ⓑ
Ⓒ
Ⓓ
B
C
E

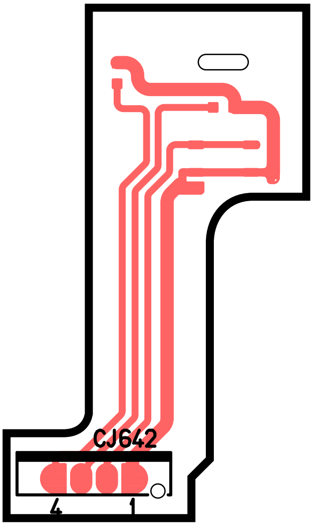
[3032-14-02] [Top View]

[3032-14-02] [Bottom View]

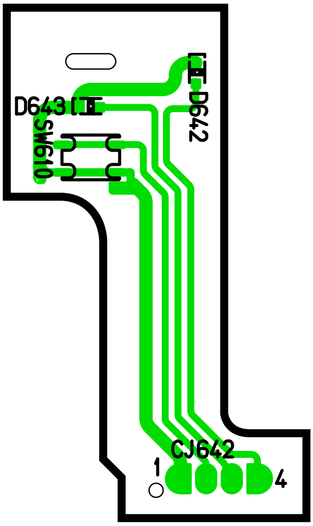

IC204
Q203
JP102
L302
L403
C101
C102
C103
C104
C105
C106
C107
C108
C137
C138
C141
C201
C202
C203
C204
C206
C207
C301
C302
C303
C311
C312
C321
C401
C402
C403
C404
C405
C406
C407
C408
C409
C410
C411
C412
C413
C414
C426
C436
R103
R104
R105
R120
R129
R131
R133
R136
R137
R138
R139
R140
R141
R142
R201
R202
R203
R204
R205
R206
R207
R208
R209
R210
R301
R302
R303
R304
R305
R311
R313
R314
R315
R324
R325
R329
R428
R429
R430
R434
R461
R482
R483
C
B


J146
TP18
J149
J159
J154
JP1
LN10
J160
J150
21
1
CN1
TP17
C40
J125
C12
J126
J129
J130
J138
C41
R37
R10
①
㉘
J127
R13
R48
J139
R62
2
J152
22
⑦
㉒
IC4
J147
R47
J158
R52
C44
J131
R61
⑧
㉑
C43
R40
J148
C53
JP2
R54
R55
LN9
LN8
R60
C52
J153
R51
J128
R39
LN7
⑭
⑮
R56
TP11
TP8
R12
LN6
C51
R57
R27
R59
J157
J132
R46
R58
TP14
J100
R28
TP9
J124
TP19
J105
C25
R34
TP12
C26
R22
J101
TP10
J155
TP13
R21
C27
J115
J116
J156
J104
J110
J117
C38
J118
J119
J123
L1
C46
J111
J120
TP15
J112
C34
C2
X1
C16
C17
C1
TP20
㊿
㉖
J106
J108
J113
J121
(51)
㉕
C24
TP16
C19
J102
J114
J133
J134
C21
C9
R20
IC1
J122
R14
C7
R53
C45
J103
C10
C20
TP7
(75)
①
LN11
J107
J109
16
J136
C4
(76)
(100)
R8
C11
C3
R1
J144
C31
C8
C32
R2
C39
TP2
C30
TP4
C28
TP6
R41
C6
J137
C5
TP3
CN2
LN2
LN1
TP1
J142
J145
TP5
1
J140
J151
LN5
LN4
LN3
J143
C35
J135
B
C
E
Q2
R30
D2

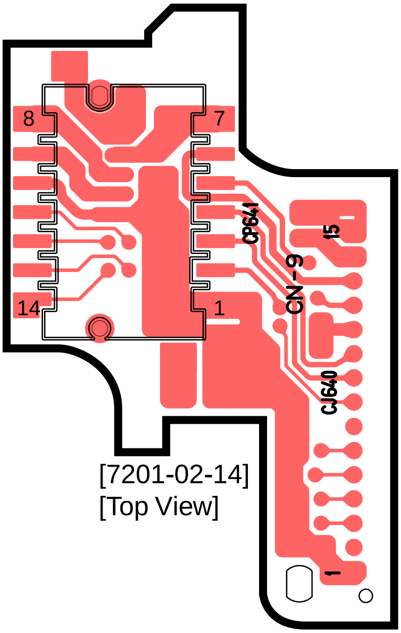
[3032-14-03] [Top View]



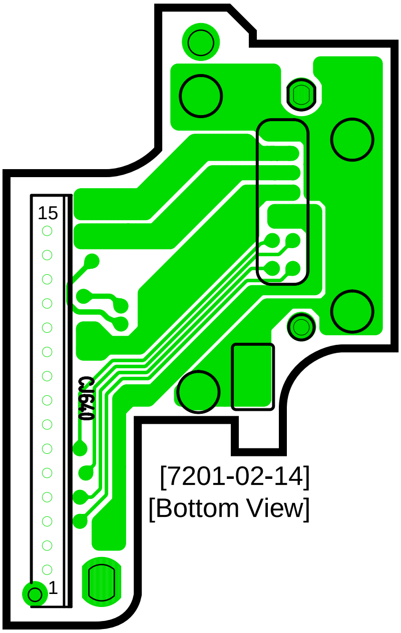
[7201-02-13]
[Top View]


D643
D642
SW610
CJ642
1
4

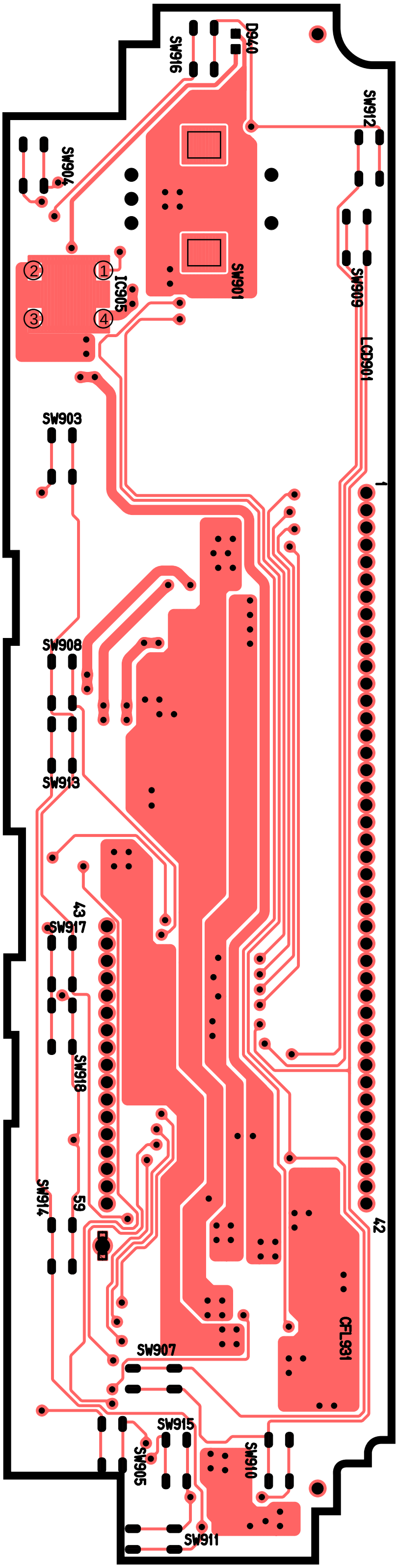
[7201-02-13]
[Bottom View]


8
7
14
1
CP641
15
CN-9
CJ640
1

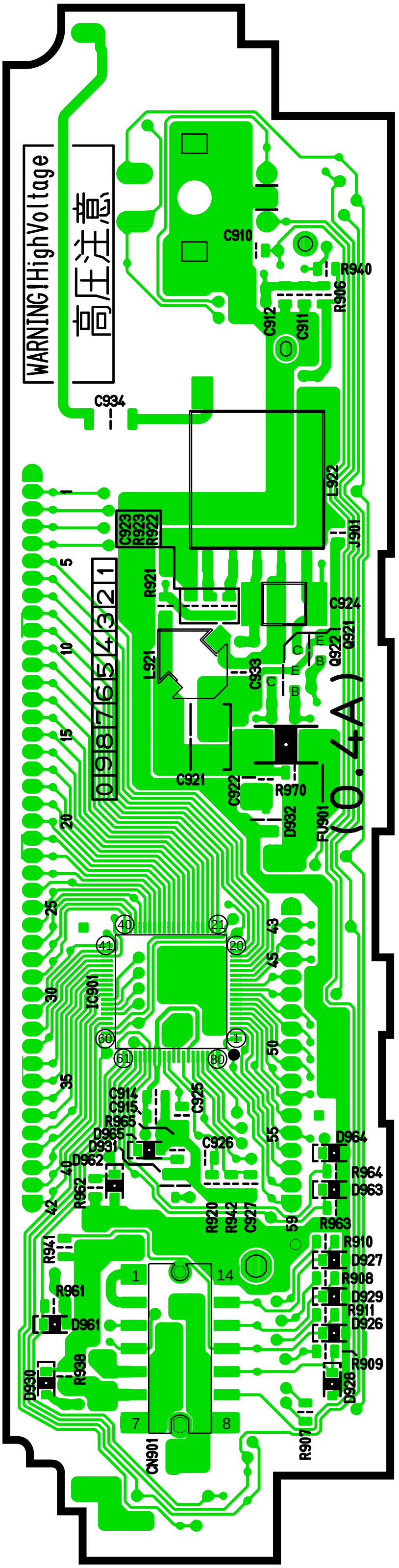
[7201-02-14]
[Top View]



[7201-02-14]
[Bottom View]

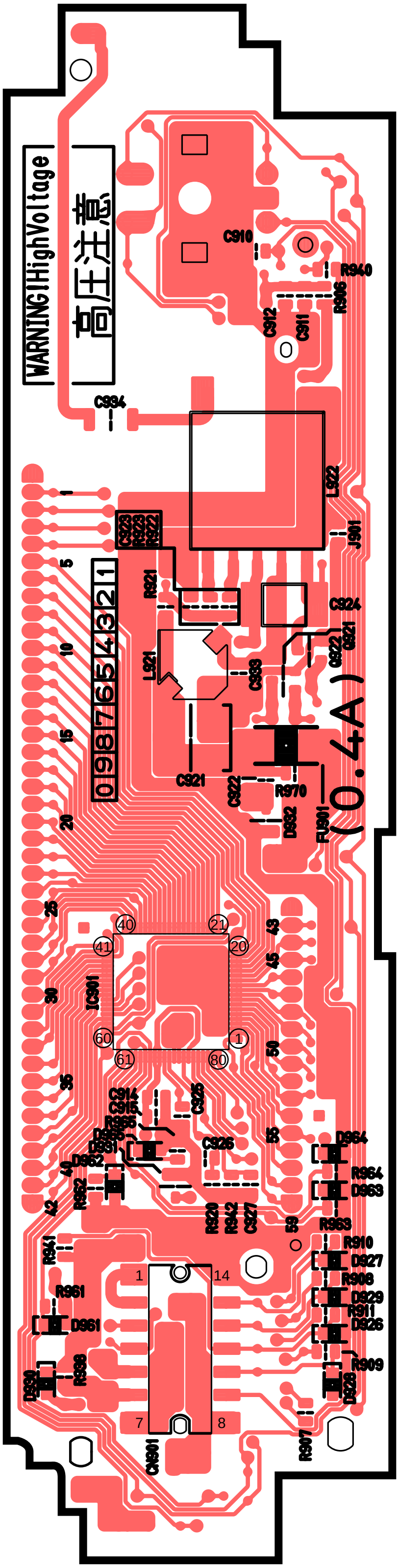

SW916
D940
SW912
SW904
IC905
①
②
③
④
SW901
SW909
LCD901
SW903
1
SW908
SW913
SW917
43
SW918
SW914
59
42
SW907
CFL931
SW915
SW905
SW910
SW911

[7201-05-01] [Top View]

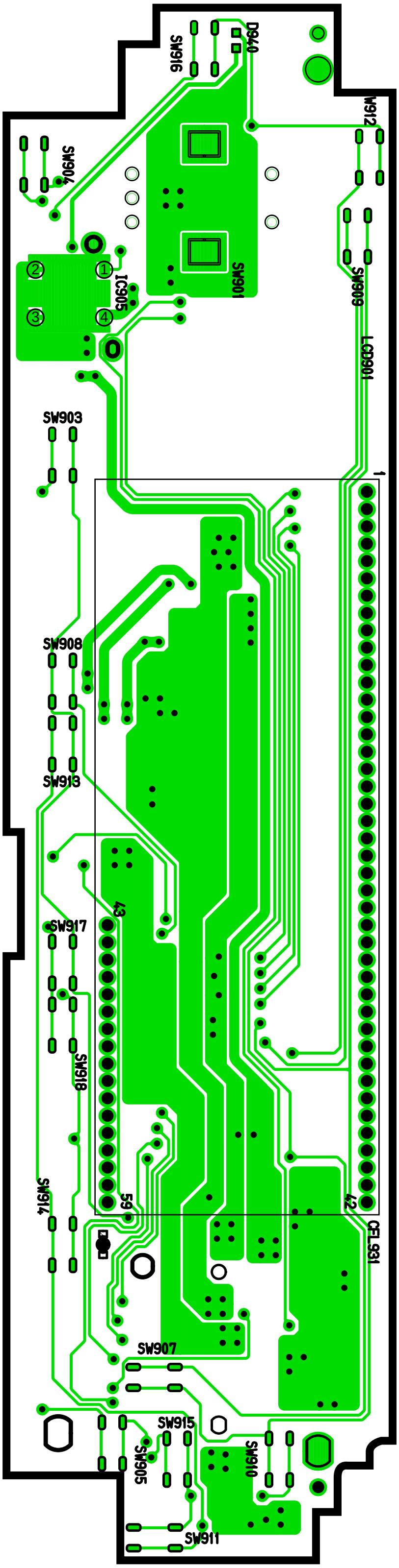

WARNING!HighVoltage
高圧注意
C910
R940
R906
C912
C911
C934
L922
J901
C923
R923
R922
R921
1
2
3
4
5
6
7
8
9
0
C924
Q921
Q922
E
C
B
L921
C933
C921
C922
R970
D932
FU901
(0.4A)
1
5
10
15
20
25
30
35
40
42
43
45
50
55
59
IC901
40
21
41
20
60
1
61
80
C914
C915
R965
D965
D931
D962
R962
C925
C926
D964
R964
D963
R963
R910
D927
R908
D929
R911
D926
R909
D928
R920
R942
C927
R941
R961
D961
R938
D930
1
14
7
8
CN901
R907

[7201-05-01] [Bottom View]

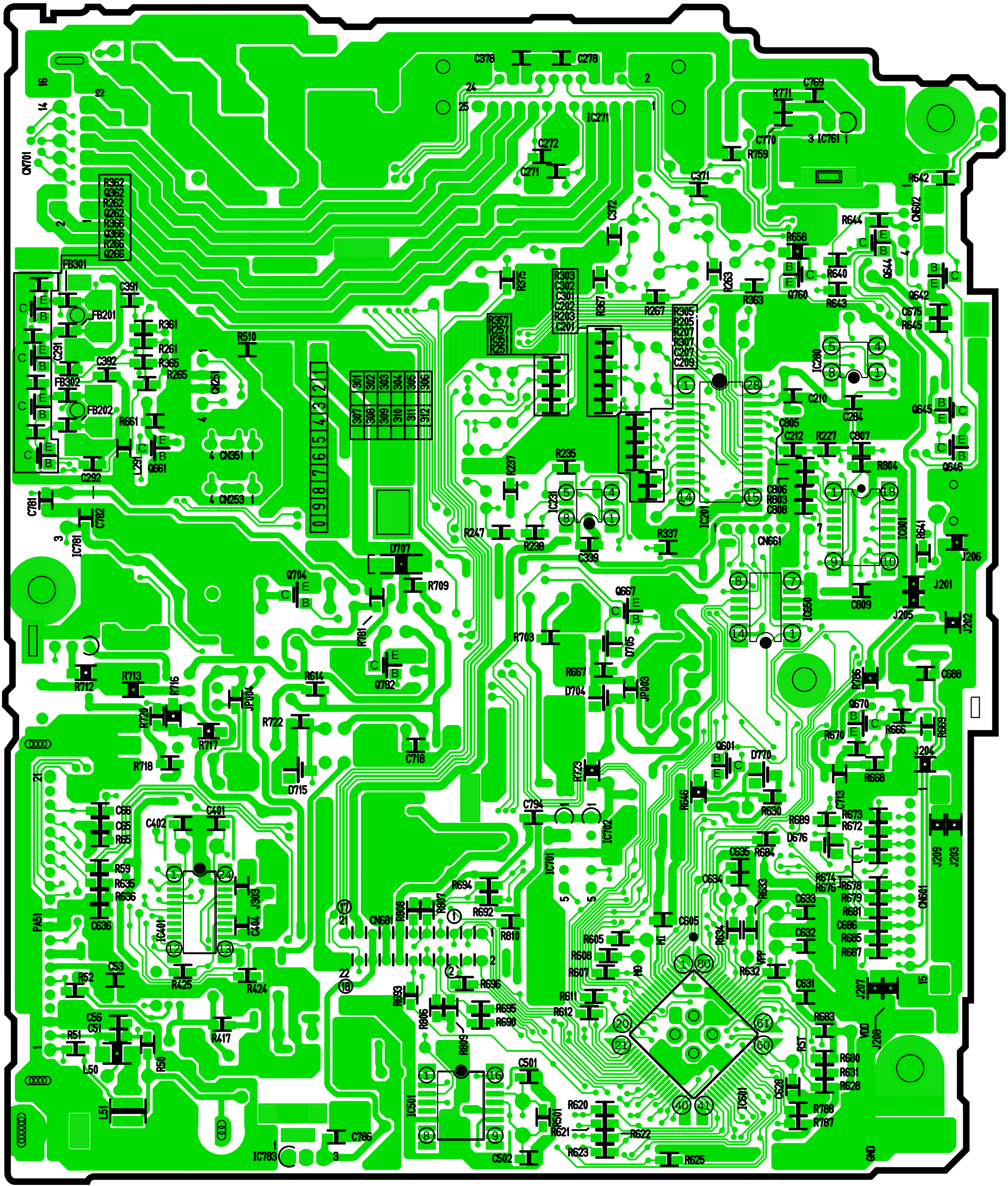
CQ-DFX683N/DFX223N/DFX213N/DFX203N ESC P.C.B


WARNING!HighVoltage
高圧注意
C910
R940
R906
C912
C911
C934
L922
J901
R921
C924
Q921
Q922
L921
C923
C921
C922
R970
D932
FU901
(0.4A)
0 9 8 7 6 5 4 3 2 1
1
5
10
15
20
25
30
35
40
42
43
45
50
55
59
40
21
41
20
60
1
61
80
IC901
C914
C915
R955
D951
D952
R952
C925
C926
D964
R964
D963
R963
R920
R942
C927
R910
D927
R908
D929
R911
D926
R909
D928
R907
R941
R961
D961
D960
R960
1
14
7
8
CN901

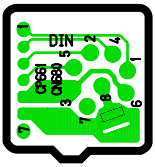
[7201-05-02B] [Top View]


SW916
D940
W912
SW904
SW901
IC905
SW906
LCD901
SW903
SW908
SW913
SW917
SW918
SW914
SW907
SW915
SW905
SW910
SW911
CFL931
1
43
59
42

[7201-05-02B] [Bottom View]

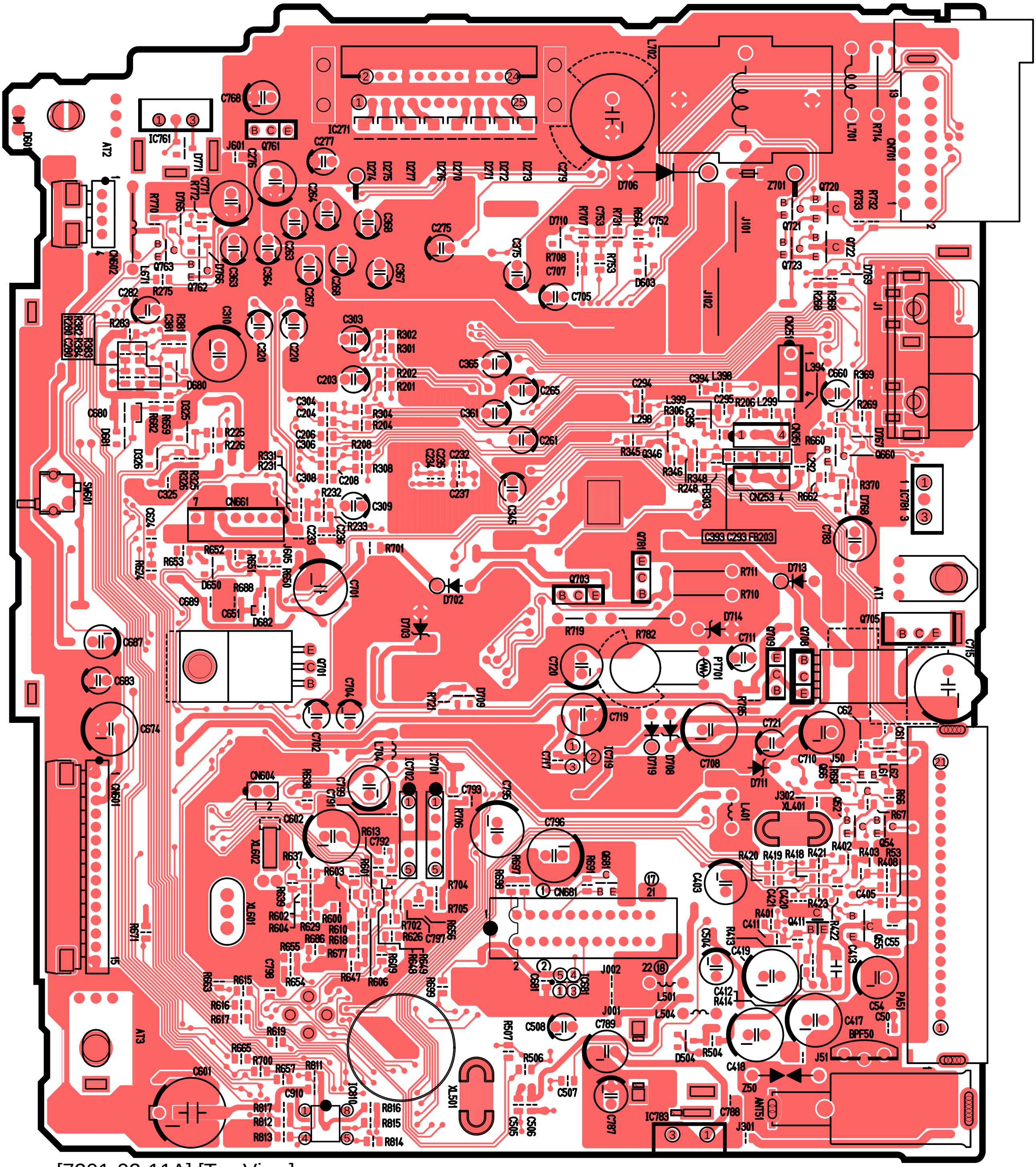

C378
C278
24
25
2
1
IC271
C272
C271
R771
C769
C770
3 IC761 1
R759
R642
CN602
C371
C372
CN701
16
13
14
2
1
R362
Q362
R262
Q262
R366
Q366
R266
Q266
FB301
FB201
C391
R361
R261
R365
R265
C291
C392
FB302
FB202
R661
Q661
L291
C292
C781
C782
IC781
3
R510
CN251
4 CN351 1
4 CN253 1
301
302
303
304
305
306
307
308
309
310
311
312
0
9
8
7
6
5
4
3
2
1
R375
R303
C302
C301
C202
R203
C201
R357
R257
R351
R251
R367
R267
R263
R363
R305
R205
R207
R307
C207
C209
R658
Q760
R644
R640
R643
Q644
Q642
C675
R645
IC280
C210
C284
Q645
C805
C212
R227
C807
R804
Q646
R237
R235
IC231
R247
R238
C339
R337
IC201
14
15
28
C806
R803
C808
IC801
18
9
10
R641
J206
J201
J205
J202
CN661
IC650
7
8
14
1
C809
D707
R709
Q704
R781
R614
Q782
R703
Q667
D705
R667
D704
JP003
R712
R713
R716
R720
R717
R718
JP004
R722
C718
D715
C688
R786
Q670
R666
R669
R670
R668
J204
Q601
D770
R630
R646
R723
C794
IC702
IC701
R689
D676
R673
R672
C713
J209
J203
CN601
C66
C65
R65
C401
C402
R59
R635
R636
C636
IC401
J303
C404
12
13
24
PA51
R425
R424
R52
C53
C56
C51
R51
L50
R50
R417
L51
R694
R692
R810
R807
R808
CN681
21
22
R696
R693
R695
R690
R806
R809
C501
IC501
16
8
9
R611
R612
R605
R606
R607
C605
M1
M0
R634
VPP
R632
C635
R684
C634
R633
C633
C632
R674
R676
R678
R679
R681
C686
R685
R687
C631
J207
15
R683
R51
R680
R631
R628
R788
R787
C628
IC601
20
21
40
41
60
61
80
VDD
J208
GND
R620
R621
R501
R622
R623
R625
C502
C786
IC783

[7201-02-11A] [Bottom View]


DIN
1
2
4
5
1
3
6
7
8
CP661
CN680

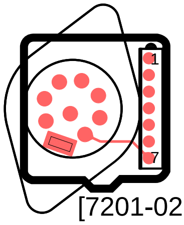
[7201-02-12A]
[Bottom View]

CQ-DFX683N/DFX223N/DFX213N/DFX203N MAIN P.C.B



D601
AT2
IC761
① ③
B C E
Q761
J601
C768
C276
C277
IC271
② ㉔
① ㉕
L702
L701
R714
CN701
13
1
2
D771
C771
R772
R770
D765
CN602
4
1
Q763
Q762
D766
L671
C282
R275
R283
C381
R381
R382 R383
R280 C280
C310
C320
C220
C264
C263
C363
C364
C267
C268
C368
C367
C275
C375
D274 D275 D277 D276 D270 D271 D272 D273
C279
D706
Z701
Q720
Q721
Q722
Q723
R733
R732
D710
R707
C753
R731
R654
C752
R708
C707
R753
C705
D603
J101
J102
D769
R368
R269
J1
C303
R302
R301
R202
R201
C365
C203
C265
D680
C680
R662
R659
D681
D225
R225
R226
D226
C304
C204
R304
R204
C206
C306
R208
R308
C361
C261
C294
C394
L398
C295
L399
R306
C395
R206
L299
L298
CN251
L394
C660
R369
R345
Q346
R346
R348
R248
FB303
CN351
CN253
R660
Q660
D767
R370
R662
C393 C293 FB203
C293
L292
IC781
D768
C783
R331
R231
C308
C208
C232
C234
C235
C237
C345
R232
C309
R233
C223
C236
C325
R326
R325
SW601
C624
CN661
7 1
J605
R652
R653
R651
R650
R624
R701
C701
D702
D650
R688
D682
C689
C651
Q781
Q703
R711
R710
D713
D714
AT1
Q705
R719
D703
R782
C711
PT701
Q709
Q706
C715
C687
C683
C674
Q701
E C B
C704
C720
R721
D709
C719
R705
D719
D708
C708
C721
C62
C61
C702
IC719
C717
C710
D711
J50
Q66
R68
L61
L62
R66
R67
Q52
J302
XL401
L401
C796
CN604
1 2
C602
XL602
C791
C799
R636
L704
IC702
IC701
C793
R706
C795
R613
C792
R601
R637
R603
R639
R602
R604
R629
R600
R610
R618
R686
R677
R655
R654
R704
R705
R702
R656
R626
C797
R609
R649
R648
R699
R697
R698
R691
Q681
CN681
⑰ 21
J002
C681
C691
① 1
② 2
⑱ 22
C403
R420 R419 R418 R421
R402
R403
R53
R408
Q54
C504
R413
R401
C411
C421
C420
R423
Q411
R422
C405
Q55
C55
C413
C419
C412
R414
C54
PA51
C417
C50
BPF50
J51
L501
L504
XL601
R671
CN601
15
R653
R615
C790
R616
R617
R619
R665
R700
R657
R611
R647
R606
XL501
C910
IC910
R816
R815
R814
R817
R812
R813
AT3
C601
R507
C508
C789
J001
R506
C507
C505
C506
C787
IC783
C788
J301
ANT51
Z50
D504
R504
C418
③ ①

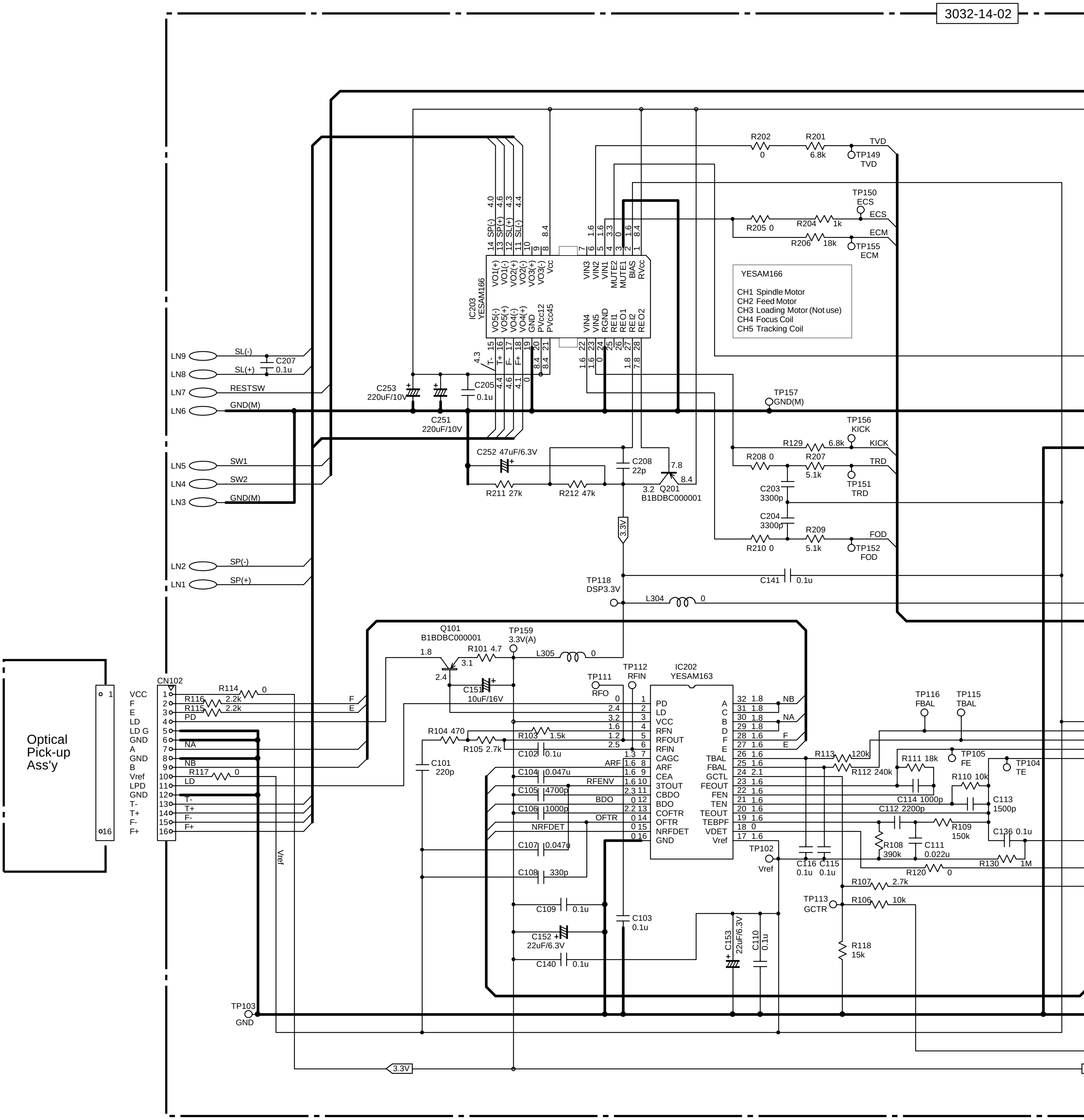
[7201-02-11A] [Top View]

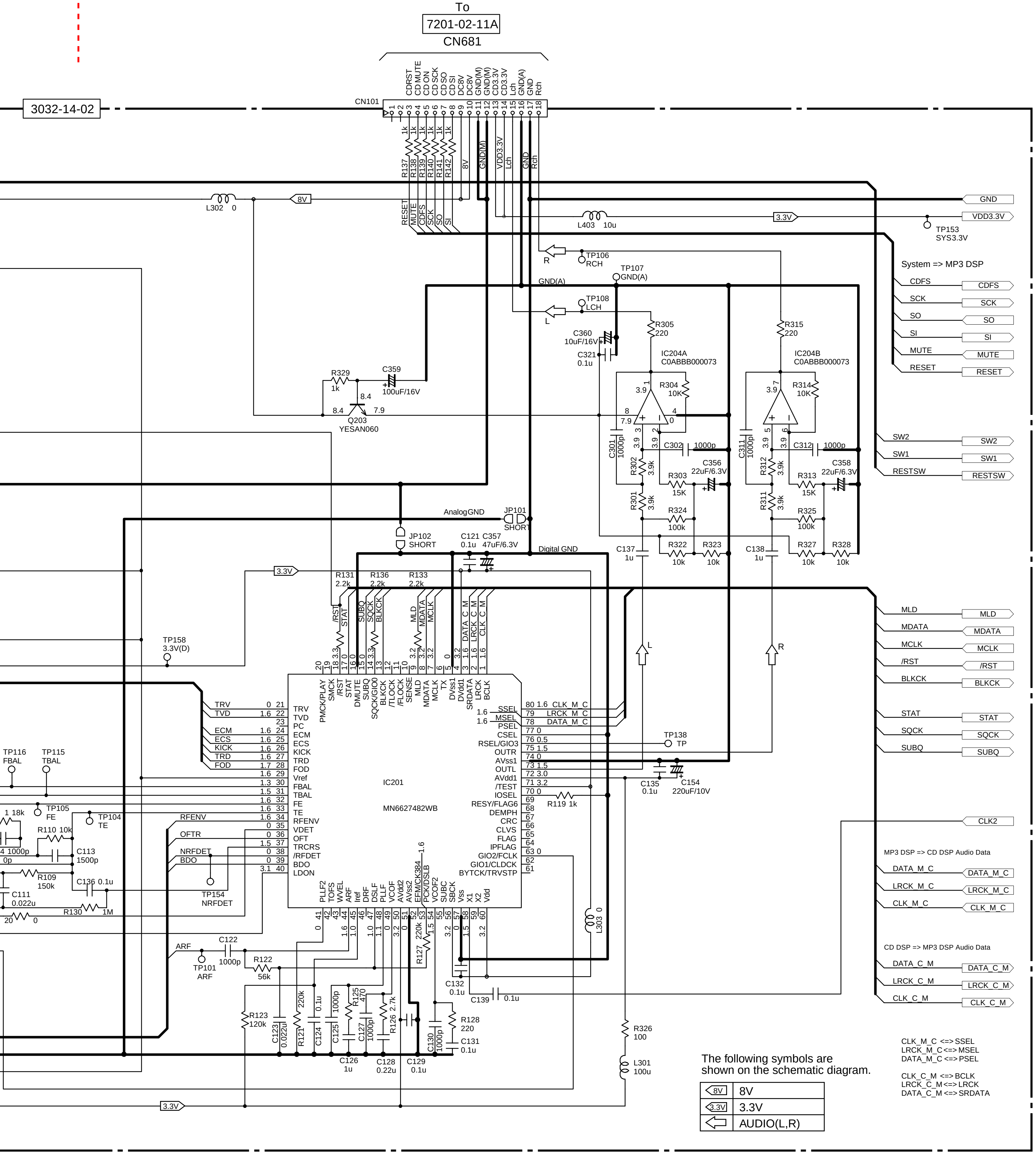


[7201-02-12A]
[Top View]

CQ-DFX683N/DFX223N/DFX213N/DFX203N MAIN P.C.B

21.5. CD Servo Block-1 [CQ-DFX683N]


3032-14-02
Optical Pick-up Ass'y
CN102
VCC
F
E
LD
LD G
GND
A
GND
B
Vref
LPD
GND
T-
T+
F-
F+
R114 0
R116 2.2k
R115 2.2k
PD
NA
NB
R117 0
LD
T-
T+
F-
F+
Vref
LN9
LN8
LN7
LN6
LN5
LN4
LN3
LN2
LN1
SL(-)
SL(+)
C207 0.1u
RESTSW
GND(M)
SW1
SW2
SP(-)
SP(+)
C253 220uF/10V
C251 220uF/10V
C205 0.1u
IC203 YESAM166
VO1(+)
VO1(-)
VO2(+)
VO2(-)
VO3(+)
VO3(-)
Vcc
VIN3
VIN2
VIN1
MUTE2
MUTE1
BIAS
RVcc
VO5(-)
VO5(+)
VO4(-)
VO4(+)
GND
PVcc12
PVcc45
VIN4
VIN5
RGND
REI1
REI2
REO1
REO2
14 SP(-) 4.0
13 SP(+) 4.6
12 SL(+) 4.3
11 SL(-) 4.4
10
9
8 8.4
7
6 1.6
5 1.6
4 3.3
3 0
2 1.6
1 8.4
15 T- 4.3
16 T+ 4.4
17 F- 4.6
18 F+ 4.1
19 0
20 8.4
21 8.4
22 1.6
23 1.6
24 0
25
26
27 1.8
28 7.8
C252 47uF/6.3V
R211 27k
R212 47k
C208 22p
Q201 B1BDBC000001
7.8
8.4
3.2
3.3V
R202 0
R201 6.8k
TP149 TVD
TVD
TP150 ECS
ECS
R205 0
R204 1k
R206 18k
ECM
TP155 ECM
YESAM166
CH1 Spindle Motor
CH2 Feed Motor
CH3 Loading Motor (Not use)
CH4 Focus Coil
CH5 Tracking Coil
TP157 GND(M)
TP156 KICK
KICK
R129 6.8k
R208 0
R207 5.1k
TRD
TP151 TRD
C203 3300p
C204 3300p
R210 0
R209 5.1k
FOD
TP152 FOD
TP118 DSP3.3V
C141 0.1u
L304 0
Q101 B1BDBC000001
TP159 3.3V(A)
R101 4.7
L305 0
1.8
3.1
2.4
C151 10uF/16V
TP111 RFO
TP112 RFIN
IC202 YESAM163
R104 470
R105 2.7k
R103 1.5k
C101 220p
C102 0.1u
C104 0.047u
C105 4700p
C106 1000p
C107 0.047u
C108 330p
C109 0.1u
C152 22uF/6.3V
C140 0.1u
C103 0.1u
C153 22uF/6.3V
C110 0.1u
ARF
RFENV
BDO
OFTR
NRFDET
PD
LD
VCC
RFN
RFOUT
RFIN
CAGC
ARF
CEA
3TOUT
CBDO
BDO
COFTR
OFTR
NRFDET
GND
A
C
B
D
F
E
TBAL
FBAL
GCTL
FEOUT
FEN
TEN
TEOUT
TEBPF
VDET
Vref
1 0
2 2.4
3 3.2
4 1.6
5 1.2
6 2.5
7 1.3
8 1.6
9 1.6
10 1.6
11 2.3
12 0
13 2.2
14 0
15 0
16 0
32 1.8
31 1.8
30 1.8
29 1.8
28 1.6
27 1.6
26 1.6
25 1.6
24 2.1
23 1.6
22 1.6
21 1.6
20 1.6
19 1.6
18 0
17 1.6
NB
NA
F
E
F
E
TP102 Vref
C116 0.1u
C115 0.1u
TP116 FBAL
TP115 TBAL
R113 120k
R112 240k
R111 18k
TP105 FE
TP104 TE
R110 10k
C114 1000p
C112 2200p
C113 1500p
R109 150k
C136 0.1u
R108 390k
C111 0.022u
R120 0
R130 1M
R107 2.7k
TP113 GCTR
R106 10k
R118 15k
TP103 GND
3.3V


To
7201-02-11A
CN681
CN101
3032-14-02
CDRST
CD MUTE
CD ON
CD SCK
CD SO
CD SI
DC8V
DC8V
GND(M)
GND(M)
CD3.3V
CD3.3V
Lch
GND(A)
GND
Rch
R137
R138
R139
R140
R141
R142
1k
8V
GND(M)
VDD3.3V
Lch
GND
Rch
RESET
MUTE
CDFS
SCK
SO
SI
L302 0
L403 10u
GND
VDD3.3V
TP153
SYS3.3V
TP106
RCH
TP107
GND(A)
TP108
LCH
System => MP3 DSP
CDFS
SCK
SO
SI
MUTE
RESET
R305
220
R315
220
C360
10uF/16V
C321
0.1u
IC204A
C0ABBB000073
IC204B
C0ABBB000073
R304
10K
R314
10K
R329
1k
C359
100uF/16V
Q203
YESAN060
C301
1000p
C302
1000p
C311
1000p
C312
1000p
C356
22uF/6.3V
C358
22uF/6.3V
R302
3.9k
R303
15K
R312
3.9k
R313
15K
R301
3.9k
R311
3.9k
R324
100k
R325
100k
SW2
SW1
RESTSW
AnalogGND
JP101
SHORT
JP102
SHORT
C121
0.1u
C357
47uF/6.3V
Digital GND
C137
1u
C138
1u
R322
10k
R323
10k
R327
10k
R328
10k
R131
2.2k
R136
2.2k
R133
2.2k
MLD
MDATA
MCLK
/RST
BLKCK
STAT
SQCK
SUBQ
TP158
3.3V(D)
IC201
MN6627482WB
TP138
TP
C135
0.1u
C154
220uF/10V
R119 1k
CLK2
MP3 DSP => CD DSP Audio Data
DATA_M_C
LRCK_M_C
CLK_M_C
CD DSP => MP3 DSP Audio Data
DATA_C_M
LRCK_C_M
CLK_C_M
TRV
TVD
ECM
ECS
KICK
TRD
FOD
TP116
FBAL
TP115
TBAL
TP105
FE
TP104
TE
R110 10k
C113
1500p
R109
150k
C136 0.1u
C111
0.022u
R130
1M
RFENV
OFTR
NRFDET
BDO
TP154
NRFDET
ARF
C122
1000p
TP101
ARF
R122
56k
R123
120k
C123
0.022u
R121
220k
C124
0.1u
C125
1000p
R125
470
C127
1000p
R126 2.7k
R127 220k
C126
1u
C128
0.22u
C129
0.1u
C130
1000p
R128
220
C131
0.1u
C132
0.1u
C139
0.1u
L303 0
R326
100
L301
100u
3.3V
8V
L
R

The following symbols are shown on the schematic diagram.

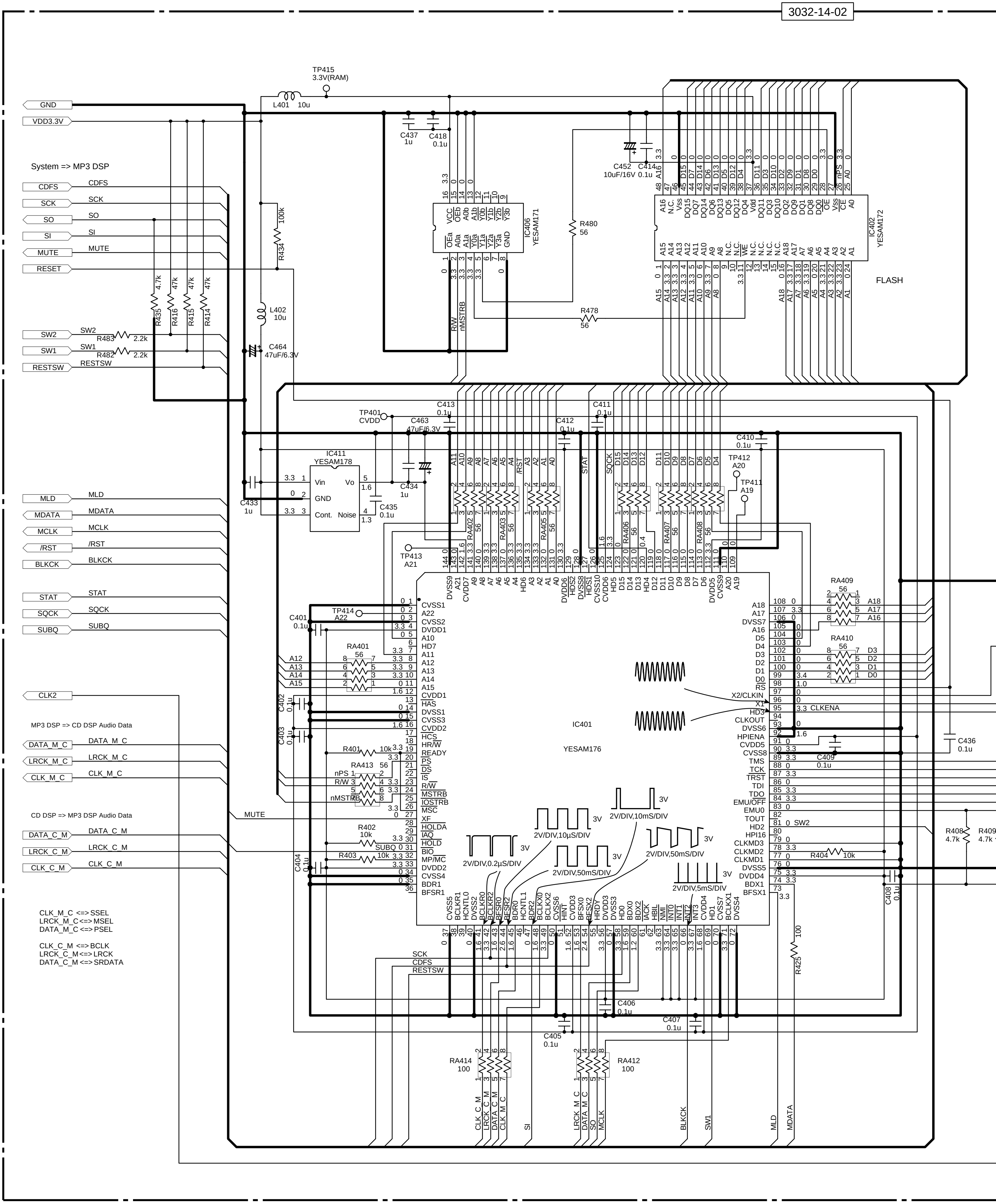
8V	8V
3.3V	3.3V
⇦	AUDIO(L,R)

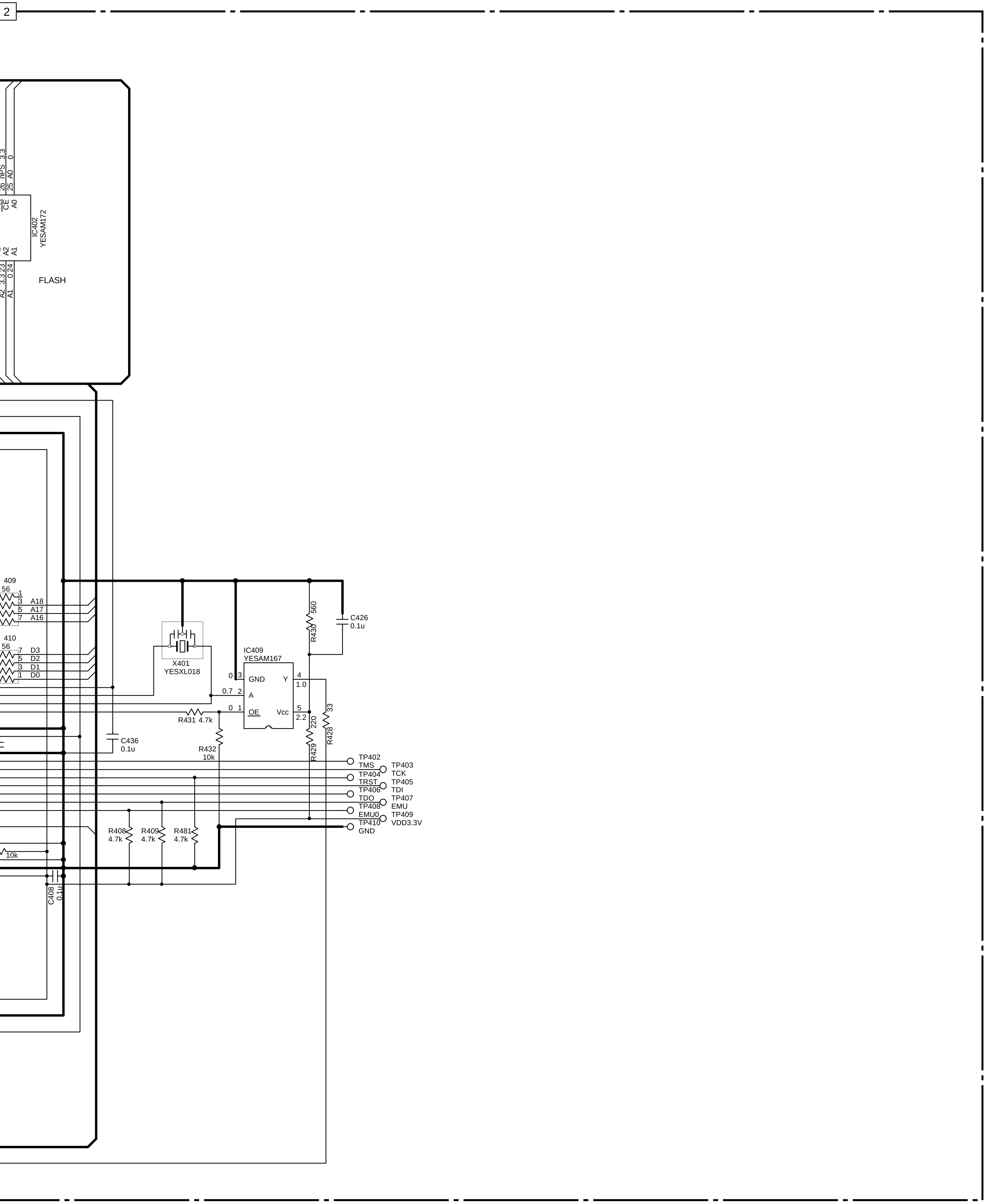
CLK_M_C <=> SSEL
LRCK_M_C <=> MSEL
DATA_M_C <=> PSEL

CLK_C_M <=> BCLK
LRCK_C_M <=> LRCK
DATA_C_M <=> SRDATA

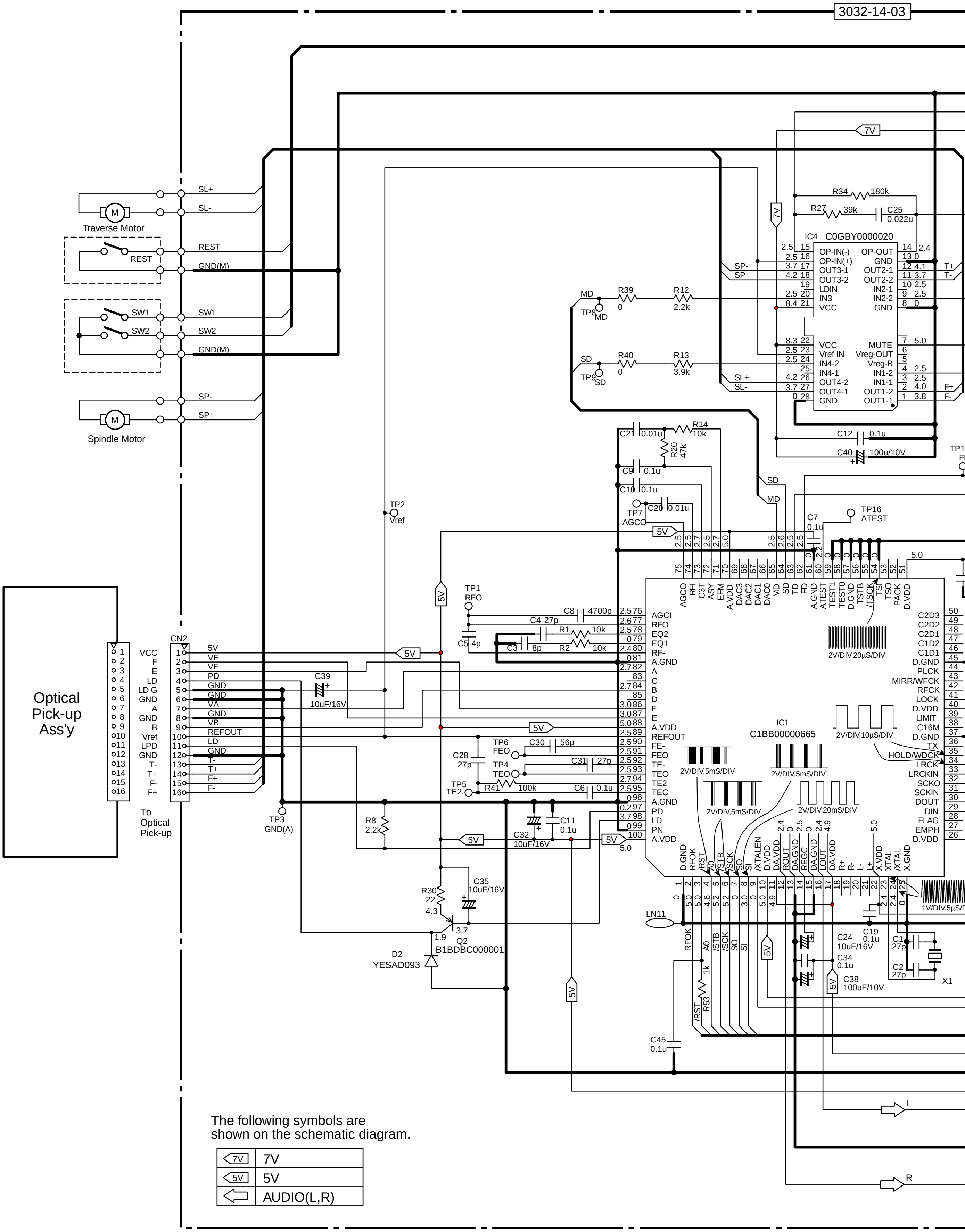
CQ-DFX683N CDM-001-1/2

21.6. CD Servo Block-2 [CQ-DFX683N]


3032-14-02
TP415
3.3V(RAM)
GND
VDD3.3V
L401 10u
C437 1u
C418 0.1u
C452 10uF/16V
C414 0.1u
System => MP3 DSP
CDFS
SCK
SO
SI
MUTE
RESET
100k
R434
4.7k
47k
47k
47k
R435
R416
R415
R414
L402 10u
C464 47uF/6.3V
SW2
R483 2.2k
SW1
R482 2.2k
RESTSW
IC406
YESAM171
R480 56
R478 56
R/W
nMSTRB
IC402
YESAM172
FLASH
TP401 CVDD
C413 0.1u
C463 47uF/6.3V
C412 0.1u
C411 0.1u
C410 0.1u
TP412 A20
TP411 A19
IC411
YESAM178
Vin
Vo
GND
Cont.
Noise
C433 1u
C434 1u
C435 0.1u
TP413 A21
RA402 56
RA403 56
RA405 56
RA406 56
RA407 56
RA408 56
MLD
MDATA
MCLK
/RST
BLKCK
STAT
SQCK
SUBQ
TP414 A22
C401 0.1u
RA401 56
A12
A13
A14
A15
CLK2
MP3 DSP => CD DSP Audio Data
DATA_M_C
LRCK_M_C
CLK_M_C
C402 0.1u
C403 0.1u
R401 10k
RA413 56
nPS
R/W
nMSTRB
CD DSP => MP3 DSP Audio Data
DATA_C_M
LRCK_C_M
CLK_C_M
R402 10k
R403 10k
SUBQ
C404 0.1u
CLK_M_C <=> SSEL
LRCK_M_C <=> MSEL
DATA_M_C <=> PSEL
CLK_C_M <=> BCLK
LRCK_C_M <=> LRCK
DATA_C_M <=> SRDATA
IC401
YESAM176
RA409 56
RA410 56
A18
A17
A16
D3
D2
D1
D0
CLKENA
C436 0.1u
C409 0.1u
R408 4.7k
R409 4.7k
R404 10k
C408 0.1u
R425 100
SW2
3V
2V/DIV,10mS/DIV
2V/DIV,10µS/DIV
2V/DIV,0.2µS/DIV
2V/DIV,50mS/DIV
2V/DIV,50mS/DIV
2V/DIV,5mS/DIV
SCK
CDFS
RESTSW
C406 0.1u
C405 0.1u
C407 0.1u
RA414 100
RA412 100
CLK_C_M
LRCK_C_M
DATA_C_M
CLK_M_C
SI
LRCK_M_C
DATA_M_C
SO
MCLK
BLKCK
SW1
MLD
MDATA


2
26 nPS 3.3
25 A0 0
CE
A0
IC402
YESAM172
A2
A1
A2 3.3 23
A1 0 24
FLASH
409
56
1
3 A18
5 A17
7 A16
410
56
7 D3
5 D2
3 D1
1 D0
X401
YESXL018
IC409
YESAM167
0 3
0.7 2
0 1
GND
A
OE
Y
Vcc
4
1.0
5
2.2
R430 560
C426
0.1u
R429 220
R428 33
R431 4.7k
R432
10k
C436
0.1u
TP402
TMS
TP403
TCK
TP404
TRST
TP405
TDI
TP406
TDO
TP407
EMU
TP408
EMU0
TP409
VDD3.3V
TP410
GND
R408
4.7k
R409
4.7k
R481
4.7k
10k
C408
0.1u

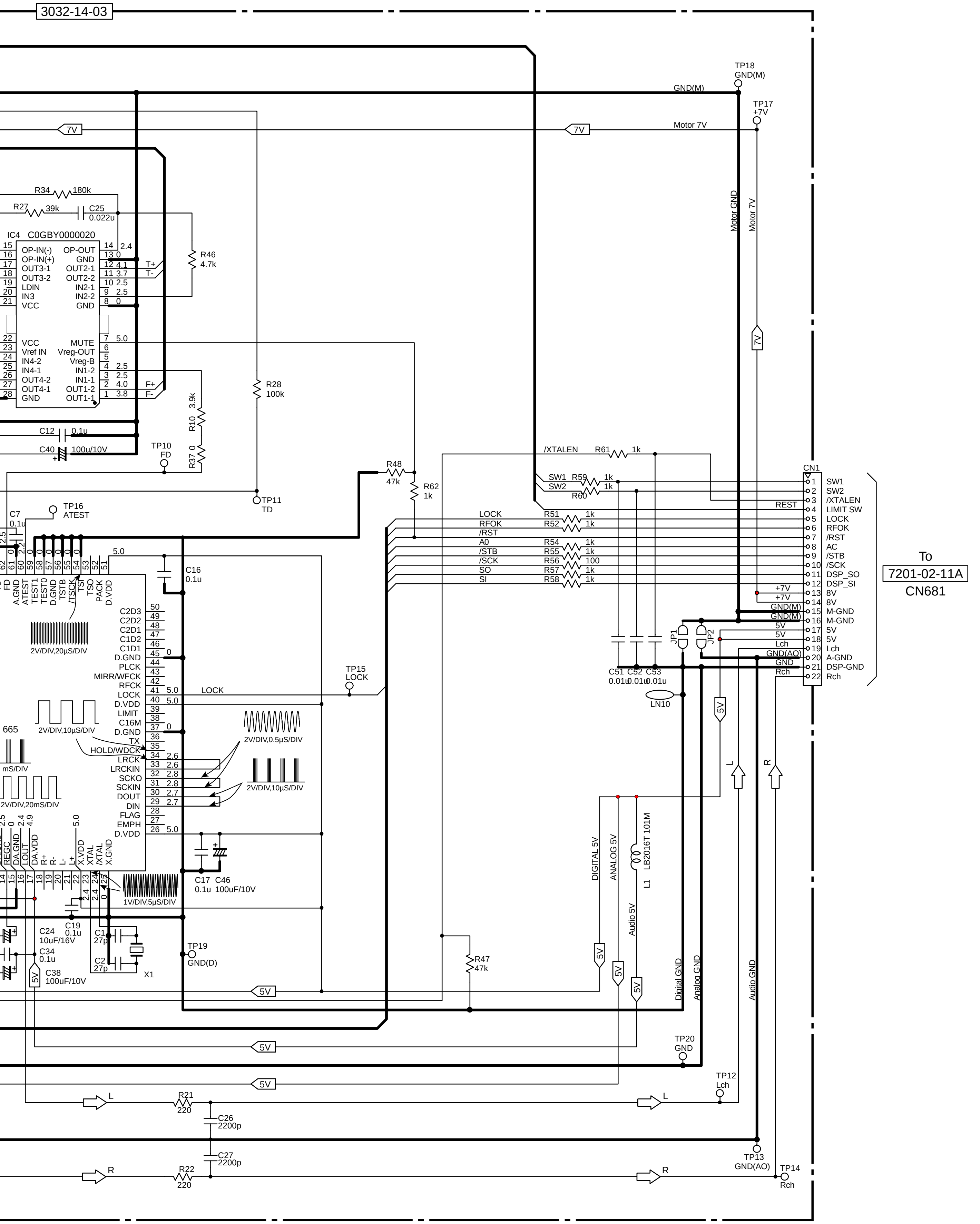
21.7. CD Servo Block [CQ-DFX223N/DFX223N/DFX213N/DFX203N]



3032-14-03
Traverse Motor
Spindle Motor
REST
SW1
SW2
SL+
SL-
GND(M)
SP-
SP+
Optical Pick-up Ass'y
To Optical Pick-up
CN2
VCC
F
E
LD
LD G
GND
A
GND
B
Vref
LPD
GND
T-
T+
F-
F+
5V
VE
VF
PD
GND
VA
VB
REFOUT
IC4 C0GBY0000020
OP-IN(-)
OP-IN(+)
OUT3-1
OUT3-2
LDIN
IN3
VCC
OP-OUT
GND
OUT2-1
OUT2-2
IN2-1
IN2-2
Vref IN
IN4-2
IN4-1
OUT4-2
OUT4-1
MUTE
Vreg-OUT
Vreg-B
IN1-2
IN1-1
OUT1-2
OUT1-1
R34 180k
R27 39k
C25 0.022u
R39 0
R12 2.2k
R40 0
R13 3.9k
TP8 MD
TP9 SD
R14 10k
C21 0.01u
R20 47k
C12 0.1u
C40 100u/10V
C9 0.1u
C10 0.1u
C20 0.01u
TP7 AGCO
C7 0.1u
TP16 ATEST
TP2 Vref
TP1 RFO
C8 4700p
C4 27p
R1 10k
C5 4p
C3 8p
R2 10k
C39 10uF/16V
IC1 C1BB00000665
AGCI
RFO
EQ2
EQ1
RF-
A.GND
A
C
B
D
F
E
A.VDD
REFOUT
FE-
FEO
TE-
TEO
TE2
TEC
PD
LD
PN
D.GND
RFOK
/RST
A0
/STB
/SCK
SO
SI
/XTALEN
D.VDD
DA.VDD
ROUT
DA.GND
REGC
LOUT
R+
R-
L-
L+
X.VDD
XTAL
/XTAL
X.GND
AGCO
RFI
C3T
ASY
EFM
DAC3
DAC2
DAC1
DAC0
MD
SD
TD
FD
ATEST
TEST1
TEST0
TSTB
/TSCK
TSI
TSO
PACK
C2D3
C2D2
C2D1
C1D2
C1D1
PLCK
MIRR/WFCK
RFCK
LOCK
LIMIT
C16M
TX
HOLD/WDCK
LRCK
LRCKIN
SCKO
SCKIN
DOUT
DIN
FLAG
EMPH
2V/DIV,20μS/DIV
2V/DIV,10μS/DIV
2V/DIV,5mS/DIV
2V/DIV,20mS/DIV
1V/DIV,5μS/DIV
TP6 FEO
C30 56p
C28 27p
C31 27p
TP4 TEO
TP5 TE2
R41 100k
C6 0.1u
TP3 GND(A)
R8 2.2k
C32 10uF/16V
C11 0.1u
R30 22
C35 10uF/16V
Q2 B1BDBC000001
D2 YESAD093
LN11
R53 1k
C45 0.1u
C24 10uF/16V
C19 0.1u
C34 0.1u
C38 100uF/10V
C1 27p
C2 27p
X1
7V
5V
L
R

The following symbols are shown on the schematic diagram.

7V	7V
5V	5V
⇦	AUDIO(L,R)


3032-14-03
TP18
GND(M)
TP17
+7V
GND(M)
Motor 7V
7V
Motor GND
Motor 7V
R34 180k
R27 39k
C25 0.022u
IC4 C0GBY0000020
OP-IN(-)
OP-IN(+)
OUT3-1
OUT3-2
LDIN
IN3
VCC
OP-OUT
GND
OUT2-1
OUT2-2
IN2-1
IN2-2
GND
VCC
Vref IN
IN4-2
IN4-1
OUT4-2
OUT4-1
GND
MUTE
Vreg-OUT
Vreg-B
IN1-2
IN1-1
OUT1-2
OUT1-1
T+
T-
F+
F-
R46 4.7k
R28 100k
R10 3.9k
R37 0
C12 0.1u
C40 100u/10V
TP10 FD
TP11 TD
TP16 ATEST
C7 0.1u
R48 47k
R62 1k
C16 0.1u
/XTALEN
R61 1k
SW1 R59 1k
SW2 R60 1k
REST
LOCK R51 1k
RFOK R52 1k
/RST
A0 R54 1k
/STB R55 1k
/SCK R56 100
SO R57 1k
SI R58 1k
CN1
1 SW1
2 SW2
3 /XTALEN
4 LIMIT SW
5 LOCK
6 RFOK
7 /RST
8 AC
9 /STB
10 /SCK
11 DSP_SO
12 DSP_SI
13 8V
14 8V
15 M-GND
16 M-GND
17 5V
18 5V
19 Lch
20 A-GND
21 DSP-GND
22 Rch
+7V
+7V
GND(M)
GND(M)
5V
5V
Lch
GND(AO)
GND
Rch
To
7201-02-11A
CN681
JP1
JP2
C51 0.01u
C52 0.01u
C53 0.01u
LN10
A.GND
ATEST
TEST0
TEST1
D.GND
TSTB
/TSCK
TSI
TSO
PACK
D.VDD
C2D3
C2D2
C2D1
C1D2
C1D1
D.GND
PLCK
MIRR/WFCK
RFCK
LOCK
D.VDD
LIMIT
C16M
D.GND
TX
HOLD/WDCK
LRCK
LRCKIN
SCKO
SCKIN
DOUT
DIN
FLAG
EMPH
D.VDD
REGC
DA.GND
LOUT
DA.VDD
R+
R-
L-
L+
X.VDD
XTAL
/XTAL
X.GND
2V/DIV,20μS/DIV
2V/DIV,10μS/DIV
2V/DIV,0.5μS/DIV
2V/DIV,10μS/DIV
2V/DIV,20mS/DIV
1V/DIV,5μS/DIV
665
mS/DIV
TP15 LOCK
LOCK
C17 0.1u
C46 100uF/10V
C24 10uF/16V
C19 0.1u
C34 0.1u
C38 100uF/10V
C1 27p
C2 27p
X1
TP19 GND(D)
R47 47k
DIGITAL 5V
ANALOG 5V
Audio 5V
L1 LB2016T 101M
Digital GND
Analog GND
Audio GND
5V
TP20 GND
TP12 Lch
L
R
R21 220
R22 220
C26 2200p
C27 2200p
TP13 GND(AO)
TP14 Rch

CQ-DFX223N/DFX213N/DFX203N CDM-002